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THE

THEORY AND PRACTICE

OF

BANKING.

THE NATIONAL BANK OF SCOTLAND EDINBURGH

THE

THEORY AND PRACTICE

OF

BANKING:

WITH THE ELEMENTARY PRINCIPLES OF

Currency; Prices; Credit; and Exchanges.

BY

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Testimony is like the shot of a long bow, which owes its efficacy to the force of the shooter; argument is like the shot of a cross bow, equally forcible whether discharged by a giant or a dwarf.—Boyle.

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APPENDIX.

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Note.—The present volume having extended to a greater length than was expected, the eighth chapter, which was intended to have been included in it, is reserved to the next.

ERRATA.

P. 187, line 3 from bottom, for "See Note p. " *read* "See Note p. 196."
P. 292, § 32, line 4, for "since" read "and."
P. 397, § 88, line 3, for "1765, c. " read "1765, c. 49."
P. 403, line three from bottom, *dele* "or."

NATIONAL

THE

THEORY AND PRACTICE

OF

BANKING.

INTRODUCTION.

THE following work is an attempt to explain in as clear and simple language as possible, the elementary principles of Currency and Banking, their progressive development in practice, and the Laws at present affecting them.

Many of the works already existing on these subjects are excellent in several respects, and contain much valuable information, but it must be admitted that the widest and most fundamental differences of opinion upon almost every point prevail amongst them, and that there is no one which is so comprehensive and systematic, or has investigated the subject with such accuracy, as to be generally accepted as an authority.

The fact of so many conflicting and contradictory views prevailing among writers, certainly argues the necessity for a more thorough consideration of the subject, but it acts as a warning against undertaking lightly, what

has hitherto produced so little that is generally received as satisfactory.

It appears, that what is required, and what is most likely to lead to satisfactory conclusions, is a more careful investigation and examination of the elementary ideas and principles of the subject, before considering their application in practice.

The Monetary System in general and Banking in particular, which forms so important a branch of it, is unquestionably to be considered as one of the Political Sciences. But the general interest it excites, and the way in which every one's welfare is affected by it, has necessarily caused a great deal of passion and prejudice to be imported into every discussion upon it, and like as in every other political science, people's views are apt to be influenced, more by the supposed benefits a particular system was calculated to produce to themselves, or to a class, than by the fundamental principles, which like every other science, it has peculiar to itself.

Being then a subject of universal interest, though at the same time strictly scientific, it was exposed to the disadvantage that numerous writers were likely to treat of it, who were not alive to the necessity of writing about it in a scientific manner. In the wish, probably, to be popular, and to avoid the appearance of being too abstract, and to repel general readers by being too formal in definitions, they certainly have lost sight of the first requisite of treating any subject in an accurate manner, that of strictly defining the meaning of all the words they used relating to it, and always adhering to the same sense of the same word. Not only do different writers use the same words in widely different senses, but it is frequently the case that they use words in a popular and vague manner, so that the reader cannot be sure of the precise

meaning which is intended to be conveyed. There are certainly several terms in common use which no writer has hitherto examined and defined, in such a manner as to meet with general assent.

It appeared, therefore, that there was room for a work which should endeavour to treat of the subject more as a science, and in a more methodical and systematic manner, than has hitherto been done. Like every other science whatever, the Monetary System has ideas and principles which are peculiar to itself, and if these could be as thoroughly and carefully investigated as is done in every other science, it would necessarily assist in removing some of the differences of opinion, and contradictory views upon the subject. It is because such care has been taken in ascertaining and settling the elementary principles of the physical sciences, that they are so well understood, and so few differences of opinion prevail about them; and it is because such care and attention has never yet been bestowed upon settling the definitions and elementary principles of Monetary Science, that it is still in so confused, controverted, and unsatisfactory a state.

Considering, then, the great importance of the subject, it is certainly desirable that some attempt should be made to supply this want, and the following work is a contribution towards it.

If this subject is to be treated in a scientific manner the very first requisite is to follow the practice adopted in every other science, and to settle its definitions and axioms. Until this is done it is useless to advance a single step into the subject. There has been no greater source of confusion and controversy than the practice we are familiarized with from our very infancy, of using words whose precise meaning we have never clearly

defined in our own minds. "This, I think, I may at least say, that we should have a great many fewer disputes in the world, if words were taken for what they are, the signs of our ideas only, and not for the things themselves. For when we argue about matter, or any the like term, we truly argue only about the idea we express by that sound, whether the precise idea agree to anything really existing in nature or not. And if men would tell what ideas they make their words stand for, there could not be half that obscurity or wrangling in the search of a support of truth, that there is."* And the difficulty and subtlety inherent in the nature of the subject is much aggravated by this ambiguity of the words and terms used, for "men think that their reason controls their language, but it often happens that words turn back and reflect their force over the intellect."†

The wide differences of opinion that prevail about the very word that stands at the foundation of the whole subject, viz., CURRENCY, strikingly shew the truth of these remarks. Some writers say that Bills of Exchange are currency, others say they are not; so witnesses of great eminence examined before Committees of the House of Commons have greatly differed in what they included under the term currency.

Now it is very clear that before persons give their opinion as to what particular things are to be considered as currency, they must form, in their own minds, some distinct idea or conception of what the word currency represents. They must first settle as a general principle what idea the word currency involves, and then decide

* Locke.

† Bacon.—Advancement of Learning. Analogous to the maxim more bluntly expressed by Hobbs, "words are the counters of wise men, but the money of fools."

what particular things are to be considered as currency. It is quite obvious that if two persons differ in their fundamental ideas of the nature of a currency, it is not very likely they can be brought to agree as to what things are currency. If they cannot agree as to what currency is, they will not agree as to what is currency. It is a pity that the committee, instead of asking the different witnesses what they included under the word currency, did not ask them—What is your definition of currency?

The same remarks apply to most of the other principal expressions and words in the subject. Equally wide differences prevail as to what is to be included under the word Capital. It is clear that before we consider what is to be included in that word, we must first settle the preliminary idea of what capital is, and so on of every other abstract expression.

The next and equally important requisite is to ascertain, and clearly settle, the axioms or elementary principles of the science. When once these are agreed upon, there will be little difference of opinion in subsequent stages, or in the application of the science; but until they are settled and assented to, it is impossible to advance without differences of opinion. It is quite impossible for any two parties to agree upon a course of conduct, if they are irreconcileably opposed as to the principles that should govern it. It is, therefore, absolutely useless to attempt to apply any science in practice until its elementary truths or axioms, which are to guide us in its application, are settled.

Axioms are those elementary truths which stand at the threshold of every science, which serve as the guides to our course of action, or reasoning, in that science. An error in these will throw the whole of our argument into

confusion, or our action will be followed by results very different from what are intended or expected. The different sciences may be readily classified, according to the different natures of these axioms, and the different methods requisite and adopted to establish their truth.

We may name these different species of axioms as follows:—I. Axioms of Intuition. II. Axioms of Experiment. III. Axioms of Observation and Experience, or of Reflection.

I. Axioms of Intuition.—These are the first principles of the sciences of pure reasoning, which we may call the Algebraical sciences, and they are incapable of proof; but it is impossible for any one endowed with the faculty of reason to withhold his assent whenever he hears and comprehends them. Such is the Geometrical axiom—*Things that are equal to the same, are equal to one another;* or the Algebraical axiom—*If both sides of an equation are multiplied or divided by the same quantity its value is not altered.* These are propositions which it is impossible to prove, but which if any one denies, he must be either endowed with an order of intelligence totally different from the rest of mankind, or he must be a fool; and though they do not convey to our mind any new truth, we constantly shape our course of argument in conformity with them, and if we could imagine it possible to disprove them, it would annihilate a great deal of what we at present hold to be certain.

II. Axioms of Experiment. These are the axioms of Natural Philosophy; which we have no certain *à priori* ground for believing to be true rather than anything else, which we only learn by experiment, and which can only be verified by direct ocular demonstration. As a type

of such axioms we may take the one in Optics, that, *when a ray of light is refracted at the surface of two media of different density, the sine of the angle of refraction bears a constant ratio to the sine of the angle of incidence.* It was clear that the angles were different, but the connection between them was by no means so evident, in fact, it was for a long time doubted that there was any fixed relation between them, and it was only ascertained at last by the ingenuity of one observer. Such an axiom as this, when announced, does not carry within itself any internal ground of conviction to those who merely hear it asserted. It would be quite as easy to believe in any other relation between these two angles, and the only way to verify it is by direct experiment, yet it is in every one's power to do so, and having been done by several persons of eminence in whom confidence is placed, it is universally received as true, even by persons who have never verified it.

Many axioms in the physical sciences are of the same nature as the preceding one, and it is evident that until they have been ascertained, and settled, it is quite impossible to make any progress in these sciences. It was just because the ancients never discovered them, or acted and argued upon false ones, that they made no progress in natural philosophy.

In these sciences the observer has generally the advantage of having his experiments within his own control. If any phenomenon appears to be complicated, and the result of several different principles, he can usually vary his experiments in such a way, as to get rid of those which are merely peculiar to that individual phenomenon, and arrive at general principles. Such experiments, therefore, when they are performed by skilful persons, who obtain general confidence, receive universal assent, even

though those who agree to them, have never verified them for themselves.

III. Axioms of Observation and Experience. These are the axioms of the Political Sciences, and are the most intricate and abstruse of any. They are neither acquiesced in intuitively, nor are they generally capable of being brought to the test of direct experiment. A man must be endowed with great power and influence in the State, to be able to experimentalize in Political Economy. He must only appeal to the general experience and observation of his readers, for an assent to the truth of his doctrines These axioms are the result of abstract reasoning applied to a multitude of intricate and complicated facts, over which the observer has no control, and which he cannot vary at pleasure. The explanation he gives of them, and of the principles he asserts to govern them, must depend for their general reception, upon the experience and reflection of mankind coinciding with his own. But the experience of one man differs from that of another. When phenomena are presented to the minds of most men, they are so complicated that few are able, or care to give themselves the trouble, to discover the principles that govern them; very few can separate what is essential from what is accidental, or what is general from what is particular. Men are so apt to be led away by what is plausible, and asserted by persons of eminence and authority, and have such a disinclination to think out for themselves, what any one else will do for them, that they are easily led to acquiesce in very great errors, if they are only presented in an attractive garb. Moreover many have not a sufficiently extended knowledge of facts to be able to test these axioms.

There can be little or no dispute about the first two

classes of axioms. The first is intuitive, and the second is capable of rigorous demonstration, and even if there should be a dispute about them for a time, it is always capable, and probably will be settled after a short discussion; but those of the third class are not so capable of being settled, but people whose minds are differently constituted will always think differently about them, or at least there will be a great difficulty in demonstrating them in so rigorous a manner, as to convince all dissentients. There is also another great source of difficulty in those of the third class. In the first two it is nobody's *interest* to maintain anything contrary to the truth, they are therefore willing to listen and agree to anything which is satisfactorily proved; but in the third persons' interests, real or imaginary, are frequently at variance with the true principles of the subject, and we know that when reason is against a man, a man is against reason, so that when sound principles are against the supposed interests of a man or a class, they will too often be against sound principles. Hence this difference in the nature of axioms causes the comparatively slow progress of the latter sciences, as compared with the others. In the first two classes, when axioms are once established they are received in all time, an error once refuted disappears for ever, but in the third species there is no security that errors or false principles, because they have been once refuted, will not reappear again, if it is the interest of any persons to maintain them ; on the contrary we constantly find the same exploded fallacies and errors, and the same crude ideas and undigested theories, in the Politico-Economical Sciences, reappearing, and gaining popularity, after they have been refuted over and over again.

The sense in which we have employed the word

"axiom" would not please Dugald Stewart, who has severely censured Sir Isaac Newton for applying the term to the principle we have selected as a type of the second species. He says,* "Into this indistinctness of language Dr. Reid was probably led in part by Sir Isaac Newton, who with a very illogical latitude in the use of words, gave the name of axioms to the laws of motion, and also to those general experimental truths, which form the groundwork of our general reasonings in catoptrics and dioptrics. For such a misapplication of the technical terms of mathematics, some apology might perhaps be made if the author had been treating on any subject connected with moral science, but surely in a work entitled 'Mathematical Principles of Natural Philosophy,' the word axiom might reasonably have been expected to be used in a sense somewhat analogous to that which every person liberally educated, is accustomed to annex to it, when he is first initiated into the elements of geometry:" and he also says, "When the word axiom is understood by one writer in the sense annexed to it by Euclid, and by his antagonist in the sense here given to it by Sir Isaac Newton, it is not surprising that there should be apparently a wide diversity between their opinions, concerning the logical importance, of this class of propositions."

Every complex idea is resolvable into several simple ones. It contains one or more general truths or ideas, or which are common to itself, and a number of other facts or ideas, and one or more which are peculiar to itself. One great source of error comes in forming general ideas from particular examples, from the care it requires to select the leading or general truth, and not to be misled into mistaking the particular truth for the general one. When a multitude of complex facts apparently resulting

* Elements of the Philosophy of the Human mind. Pt. II., chap 1.

from contradictory and conflicting causes, are placed before the observer, it is just the proof and measure of his skill and sagacity, to discover the idea which is common to them all. If he can discern this leading idea, they fall into harmony and order, but if he only takes one of the particular truths, nothing can reconcile them, and they present the appearance of an inexplicable chaos.

It is just from having erred on this point that Stewart has so ignorantly censured Newton for using the word "axiom" in the sense he has done. Stewart formed his idea of the word "axiom" from thinking of a *geometrical* axiom, and he mistook the particular idea for the general one. Because geometrical axioms are intuitive, he hastily concluded that all axioms must necessarily be intuitive, and because the axioms of optics, and other physical sciences are *not* intuitive, he rashly censured Newton for not using the word in its usual sense.

When we consider an axiom to mean an elementary truth which lies at the foundation of a science, we shall see the perfect propriety of Newton's use of the word, and that it also coincides with the popular meaning of the word; thus it is not an uncommon saying, "It is an *axiom* in political arithmetic, that two and two do not always make four," the meaning of which is that experience proves that if a tax be doubled it does not follow that the receipts from it will be doubled; or as Sir Archibald Alison says,* "The fundamental error of Mr. Huskisson and the Bullion Committee on this subject, consisted in the principles which they laid down as *axioms*, that the measure of the depreciation of the currency was to be found in the difference between the market and the mint price of gold." Where it evidently means that that principle or axiom was employed as a

* History of Europe. Vol. XIV., p. 70. 7th Edition.

guide in a certain course of action or argument respecting the currency.

Complex ideas may be compared to chemical substances. They are made up of several elementary principles. Now the chemists use a most ingenious notation. They express every substance by the letters or signs denoting its separate elements, so that by placing the chemical expressions for any number of substances side by side, it can be seen by simple inspection which elements are common to any of them, and which are peculiar to each. Would that we could frame some such ideal chemistry, which should shew by simple inspection the elementary truths in every complex idea or fact! What a world of error and confusion might be saved! What fruitless labor, misdirected exertion, and erroneous legislation, would have been avoided!

Having thus vindicated the use of the word "axiom" in this sense, we may observe that those in political subjects are *not* intuitive, but on the contrary, frequently the result of long continued observation and reflection, and propositions are often only established as axioms after lengthened controversy. So far from being intuitive, they often appear at first sight to be the very reverse of truth, and we are only convinced of their truth by a long course of abstract reasoning, combined with observation and reflection.

Another most abundant source of error is, when two phenomena are related to each other to mistake the cause for the effect. No more striking instance of this can be selected than the Theory of Rent, which was propounded by Mr. Ricardo. In a few words, Mr. Ricardo's axiom is, that the expense of raising corn on the worst land in cultivation will determine the average price of wheat, and afford and measure the rent of lands

of a superior quality. Thus he says,* "When land of an inferior quality is taken into cultivation, the exchangeable value of raw produce will rise, because more labor is required to produce it." This principle has attained great fame and currency, partly, no doubt, because the experience and field of observation necessary to correct and verify it, are within so few peoples' reach, moreover few people know exactly how to set about to verify it. Whether it is so popular as it once was we are unable to say. It is strenuously defended by some of the latest and best writers upon Political Economy, as Mr. John Stuart Mill, and in the edition of the *Encyclopædia Britannica*, which is in course of publication, it says:—

"That this subject may be properly understood, it is necessary to premise that the average value of corn, like that of every commodity, is regulated in every stage of society, *by the greater or less quantity of labor necessary to its production, under the most unfavorable circumstances.*" †

Notwithstanding these authorities, we have no hesitation whatever in saying that the Ricardo Theory of Rent is a mere delusion; and that it is fundamentally erroneous inasmuch as it inverts the relation of cause and effect. From an intimate knowledge and observation of the action of prices in an agricultural district, and the views of farmers in taking farms, we have no hesitation in saying that it is *not* the cost of cultivating the worst lands which determines price, but the precise reverse, and *that it is the average value or price of corn which determines the worst quality and most ill situated land that can be cultivated with a profit, and also decides whether there can be any rent for it.* When the Corn

* Principles of Political Economy and Taxation, p. 60.

† Article Corn Laws, Vol. VII. p. 385.

Laws were under discussion in 1846, the Protectionists unanimously said that if wheat fell below a certain price, it would throw all the poor lands out of cultivation, they did *not* say that if the poor lands were kept in cultivation it would keep up the price of corn. Those who are familiar with the letting of farms in districts where the competition for farms is free, will probably agree that farmers are guided in their offers of rent by the supposed average price which corn will fetch.

It is evident that this is no mere piece of vain logomachy, but is the very root of the matter; we have no hesitation in saying that Ricardo has inverted cause and effect, and that the whole theory of Rent based upon this erroneous axiom, is a delusion and a chimera, and that any course of action based upon so fallacious an axiom, would infallibly lead to results precisely the reverse of what was intended and expected. But there is no use to argue further upon the subject until it has been decided which of these two opposite opinions is correct. But how is it to be decided? not by intuition, or by experiment, but by an appeal to the experience and observation of persons, who have had an opportunity of contemplating a sufficiently extensive field of facts relating to the subject. When this point is settled, there will be no difficulty in pursuing the subject further, but until it is so, it is impossible to advance a single step. Persons who held such opposite opinions could not agree in any common line of action, if they wished to produce any given effect.

The best way of testing the truth of such axioms, is to push them to all their legitimate consequences. If the axioms are true to nature, the logical consequences from them will also be true to nature. If the consequences which would result from such a course of action are no-

toriously absurd, we may very safely pronounce the axiom to be erroneous; but if these further consequences be consistent with known facts, we may well be satisfied with the truth of the axiom. The Ricardo Theory of Rent pushed a step or two further, leads to a course of action which is notoriously absurd, for if it be true, it necessarily follows as a logical consequence from it, that if we persevere in bringing a poorer quality of land into cultivation, it will cause the price of wheat to rise, whereas the very reverse would be the effect of doing so, it would *lower* the price of wheat. On the contrary, the axiom we have established in Chap. II., indicates to us a course of action, which if pursued, would notoriously lead to the desired result. We have there argued that the relation of supply and demand is the sole regulator of price or value, the consequence of which is, that if we wish to raise the price of corn it is not by bringing poorer lands into cultivation, but by *diminishing the supply.* General experience will shew, that if we had the power of diminishing the supply as much as we pleased, the price would certainly rise, and hence we conclude that the axiom is true.

As another remarkable instance of the inversion of cause and effect, we may take Sir Josiah Child's plan for lowering interest by law.* Seeing that as nations became richer, and capital more abundant, the rate of interest was reduced, Sir Josiah strongly advocated the reduction of interest by law as the means of increasing the wealth of the nation. It is perfectly clear that the fall in the rate of interest is produced by an increase in wealth, just as fine weather causes the barometer to rise, and not the reverse. To think that a forcible reduction of interest caused an increase of capital was similar to the idea of

* A Discourse upon Trade: by Sir Josiah Child. 1698.

the schoolboy who wished to secure fine weather for his holiday, by screwing up the barometer over-night.

Seeing then that the whole difficulty in these Political Sciences lies in establishing the definitions and axioms, no labour can be too great, no inquiry too tedious, which is necessary to arrive at and establish accurate ideas. But it is a remarkable circumstance, that the sciences in which the chief difficulty is in establishing axioms which shall be received universally as true, are the very ones in which writers have been most negligent in doing so.

Considering therefore that the purpose of this work is to endeavour to bring the subject into a more systematic form than has hitherto been done, we must begin exactly in the same manner as all the other sciences are treated, by settling its definitions and axioms. But as they are of so different a nature from those of the other sciences, and are the result not of arbitrary ideas, but are the representatives of ideas which can only be verified by reflection and an appeal to existing circumstances, they require to be treated much more copiously than is usual in such cases. If they are once assented to, there is no more difficulty in the subject; because, if these preliminary truths be agreed to, the course of action necessary to produce any desired result is so plain and obvious, as to require little to be said about it.

In accordance with the views developed in the preceding paragraphs, the proper method of treating the subject appeared to be to examine at first, the general principles upon which it is founded, and the fundamental ideas involved in it, considering it simply as a science, and after having established these principles, to trace their gradual adoption and development in practice. The first six chapters are devoted to this part of it.

The first chapter is occupied with settling the definitions of the different expressions and technical words peculiar to Monetary Science. As it has grown out of the wants and necessities of mankind in the progress of civilization, the actual things existed in practice long before they acquired a name. It appeared, therefore, more likely to lead to accuracy and precision to commence by describing the circumstances out of which each technical expression originated, and the want it supplied, than in the more formal manner usual to definitions. We begin, therefore, by leading the reader to the circumstances which originated the necessity of the fundamental word in the whole subject—Currency—and by tracing these we are led to a natural and obvious *definition* of the word; for by indicating the *want* it supplied, we naturally conclude that whatever supplies that want is currency.

Having then established the idea represented by the word currency, we are led to consider the different kinds of it in use, and the same idea will serve as a criterion to enable us to discriminate between what things are to be considered as currency and what are not, and to add various illustrations of its action and effects. The remainder of the chapter is occupied in settling the meaning of several other words in a similar manner.

The second chapter contains an investigation of the Theory of Prices. The action of the issues of Banks upon Prices has been the subject of long and keen controversies. It was therefore necessary to investigate the causes which produced a change in prices. The method adopted in doing this is similar to that followed in cognate subjects. A few simple examples of extreme cases are taken, and the causes which influence prices in those

particular instances are analyzed, and a general rule is deduced, which, it is asserted, is of universal application. The remainder of the chapter is chiefly occupied in a number of other examples and illustrations of this general formula; and a correction of the principles of some preceding writers on the subject.

The third chapter contains an account of the different substances used as a currency by different nations, and the different changes in weight and fineness, which the English currency has undergone.

Although the question of Interest might be included under the general Theory of Prices, its great importance in Banking demanded a fuller examination than it could receive there. The fourth chapter consequently treats of the nature of Interest, and the causes which govern its rate, as well as the method of Discount which bankers universally adopt in practice.

The profits arising from adopting the method of discount are very different from those by way of interest. But while every work on Algebra contains the formulæ for calculating interest, no algebraical writer seems to have understood the method of discount as practised by bankers. What is usually called discount in the ordinary books, is never used by bankers, and the account of it given by them is of no use in banking. The whole subject is therefore investigated in a note to the fourth chapter. The practice actually adopted by bankers is described, and the algebraical formulæ which indicate the profits actually realised by this method are deduced. The formulæ thus found are perfectly novel, but it is impossible to arrive at any correct conclusion without them. Together with those for simple and compound interest, which are to be found in any ordinary book

of Algebra, they will enable us to resolve any question in banking finance. By their assistance, and by that alone, we can ascertain the result of any operation in banking, of which examples and several illustrations are given.

The most essential feature of modern commerce is the system of credit, and the enormous magnitude of transactions which are effected by means of Bills of Exchange. The fifth chapter treats of the whole THEORY OF CREDIT, and fully examines the nature and effects of the different forms of credit.

The sixth chapter treats of the THEORY OF EXCHANGES. The modern Bank Act professes to regulate the paper currency by the Exchanges. It is necessary therefore to investigate the Theory of the Exchanges, and to examine the reciprocal action of Bank issues, and the Exchanges upon each other.

These six chapters comprehend what we may call the entire theory of the subject, or its general principles without reference to any particular system adopted in any particular country, and the following chapters contain an account of the rise and gradual progress of their application in different ages and nations.

The seventh chapter treats of the rise of Banking and the progress made in it by the nations of antiquity, the Jews, the Greeks, and the Romans; its revival in the middle ages, by the Italians, and in modern times by the Dutch; and its rise and progress in Scotland, with an account of the existing system in that country.

The eighth chapter traces the rise and progress of Banking in England. From the monopoly created on behalf of the Bank of England, the most essential features of English Banking, up to the year 1826, resolve themselves into an account of that Institution, and this chapter

includes a history of its foundation and progress up to the year 1800, including an examination of its course of action during various commercial crises during the course of the last century, and of the causes of its suspension of payments, partially in 1697, and totally in 1797.

The second Volume will contain the continuation of the History of the Bank of England up to the present time, with a full examination of the Report of the Bullion Committee in 1810, the Act for the resumption of Cash payments in 1819, and the Act of 1844; the rise and progress of Joint Stock Banking, with the various Acts affecting it, and a summary of Banking Law.

The highly developed and artificial state of Banking, as it exists at present, produces extremely complicated phenomena, and an attempt to deal with it, as it is, could scarcely produce a result free from perplexity and controversy. As, however, it is the result of a number of simple causes and principles which were successively devised and adopted, it seemed that the greatest chance of arriving at a satisfactory opinion about the general result was to consider each of these principles separately in the order in which they were applied, and the effect they produced in modifying the system already existing.

The course indicated by the preceding remarks, seemed to be the one in which the Science of Banking could be treated in the most comprehensive and systematic manner. In a subject so extensive, and so controverted, it is not to be expected that any work can be free from some errors of detail, or that there will not be found many to dissent from its views and arguments. But whatever differences of opinion may be entertained as to the correctness of the particular arguments in the following pages, we think it highly desirable that some attempt

should be made to reduce the whole subject into a more regular and methodical form, than has hitherto been done, and we hope that it may be of some service to call attention to the reasons which have hitherto caused so little satisfactory progress to be made in it, and to indicate the method which may lead to less disputed conclusions.

CHAPTER I.

DEFINITIONS AND ILLUSTRATIONS OF THE TERMS USED IN MONETARY SCIENCE.

OF EXCHANGEABLE VALUE—DIMINUTION IN VALUE—CIRCUMSTANCES OUT OF WHICH THE NECESSITY FOR A CURRENCY ARISES—DEFINITION OF CURRENCY—DEPRECIATION IN VALUE—EXCHANGE AND SALE—DIFFERENT SPECIES OF CURRENCY—CAPITAL—FIXED AND FLOATING CAPITAL—WEALTH—RESOURCES.

1. As soon as men began to render each other services, they must have estimated how much of one kind of service should be given as an equivalent for another. The most natural measure which would suggest itself to their minds, would be the quantity of labor which each had bestowed on the service he was able to render. The hunter would consider what was the average produce of a day's chase, and he would soon learn the amount of his produce which should be exchanged for a certain amount of the produce of the herdsman, or the tiller of the ground. Different productions would by this means acquire a certain fixed value relatively to each other, and this would constitute their EXCHANGEABLE VALUE, and would remain pretty uniform, so long as the same amount of labor continued to produce an equal quantity of each of them.

2. If animals of the chase became unusually abundant, so that the hunter could obtain an increased quantity of his produce, with no greater labor than before, while the fruits of the fold and the field remained the same, the shepherd and the farmer would be no longer content to receive the same amount of the hunter's produce in exchange for the same quantity of their own. In proportion as it was obtained with greater facility, they would demand more of it, and the exchangeable value of these productions, or the respective quantities of each of them which were considered as equivalents, would undergo an alteration. The produce of the hunter would be DIMINISHED IN VALUE, because a greater amount of it than formerly would be required as an equivalent for the same amount of the produce of the shepherd or farmer.

3. If it could happen that whenever one man required the services of another, that other at the same time had need of an equivalent amount of his services in return, such transactions could take place with great facility, and the amount of services rendered on each side being equal, the parties would continue as before. But it would often happen that when one man required a certain amount of service from his neighbour, that neighbour would not require an equal amount of service from him in return at that time; so that if a transaction between them took place with such an unequal result, and the one amount of service were balanced against the other, there would remain over a certain difference or amount of service due from the first to the second, and this would constitute a DEBT.

4. It would probably happen that, though not at that time, still at some future time, the second would require to have the balance of service due to him by the first performed, and the debt discharged, and in the

meantime he would like to have some evidence or memorial to prove this debt, and accordingly he would require his debtor to give him some sign or token of the fact. If writing had been known in those times, a statement in writing, acknowledging the debt, and promising to render the service due whenever called upon to do so would be a natural form of such evidence. This written obligation, which he could carry about with him, and by which he could demand the service, or production, to be rendered to him whenever he pleased, would be far more convenient than to be burdened with the trouble of keeping the production itself until he required it, because it might spoil or decay in the hands of a person who did not understand its proper management, whereas, if left with the producer who made it his particular business to render this species of service, he would keep the production at its full value till it was required, or he would give another of the same value.

5. We may now suppose that the second person has dealings with a third, and requires his services, but that the third has no immediate use for the services of the second in return, but has use for the services of the first; now if the parties were so circumstanced, what could be more natural than for the second to transfer to the third the debt due to him from the first? A similar operation might be repeated by several different parties an indefinite number of times, and so the written obligation, or this evidence of a debt, would pass from hand to hand, or be current, and from this use of it, the thing itself would be what is called a CURRENCY.

6. This *currency* is nothing more than the evidence of services having been rendered for which an equivalent has not been received, but can at any time be demanded; and it is obvious that as soon at it has been demanded

and rendered, the evidence of its being due must be given up to the debtor to be destroyed, and will be no longer current. Now, if any man can render services to his neighbours, he must, in return, receive either services, or the evidence of their being due; and if he renders more than he immediately requires in return, he will accumulate a store of this evidence for his future wants.

7. It is clear that such a written obligation as is described, derives its whole transferable or current value from the fact, that the person who acknowledges himself bound to perform such services, can render them at any moment that he may be called upon, and is generally believed to be able to do so.

8. These simple considerations at once shew the nature of a *currency*. It is the evidence of a debt due to the possessor of it proving that he has rendered services for which he has received no equivalent, but which he can demand at any time; and when he does demand it, he must give up or extinguish the evidence of his debt. Hence the use of the currency is to facilitate the transference of debts from one person to another, and whatever means be adopted for this purpose, whether it be gold, silver, or paper, is a currency.

9. We may, therefore, lay down as our fundamental definition that CURRENCY AND TRANSFERABLE DEBT ARE CONVERTIBLE TERMS: whatever represents transferable debt of any description is currency; and whatever material the currency may consist of, it represents TRANSFERABLE DEBT, and nothing else.

10. It is evident that such a currency would only be of any value as long as people agreed to receive it and believed that the debtor could perform his promise. But if he granted a great many obligations to render services, people would begin to doubt whether he could perform

the whole of them, and they would probably think how much he could do of what he had promised, and as this would be the measure of the real value of the promise, it would not be received as current for more than that, and this currency would become DEPRECIATED in value. If this went on for any length of time, they might cease to have confidence that he could perform his promises at all, and they would not receive the paper, and consequently it would cease to be a currency.

11. The examples given in the second and last paragraphs, will serve to illustrate the difference between two expressions which, though often used indiscriminately, are essentially distinct, viz. *diminution in value* and *depreciation*. An *alteration in value* of any commodity means, that the quantity of it which was considered as an equivalent for a certain amount of some other commodity with which it is compared, has undergone a change. *Depreciation* means that the thing is not really of the value it professes to be. Alteration in value of a commodity is always used in reference to some other commodity with which it is compared; depreciation in reference to itself. Thus, if a bank note which professes to represent, and be of the value of five sovereigns, will only purchase four sovereigns, it *is depreciated;* or if a guinea, which professes to contain a fixed weight of pure gold, does not contain that amount, it is *depreciated.* But if, while guineas contain their full amount of gold, their quantity is greatly increased, it will require a greater number of them than before, to be given as an equivalent for the same amount of commodities, and they will then be *diminished in value.* The expression *diminution in value* is applicable both to commodities and money; the word *depreciation* is more properly restricted to currency.

12. This currency would have another inconve-

nience. In such a written obligation as we have supposed, the amount of the debt due would of course be expressed, and it might very often happen that the person who was the owner of this obligation would not require to have the whole amount of it rendered at one time. If he had only part of it rendered, he would have to give up the original obligation, and receive a new one for the remainder. This operation would be both tedious and inconvenient, and the next improvement that would suggest itself would be to have a currency which should not only be evidence of the debt, but also be capable of measuring its amount, so that the *quantity* of the currency should bear some relation to the *amount* of the debt.

13. If the debtor were to acknowledge his debt on paper of a certain size, it would be very inconvenient in practice to represent half the amount of the debt by cutting the paper in half, and so on in smaller fractions, so that if the material of the currency was paper, he would have to write an acknowledgment for each minute fraction of his debt on a separate piece of paper, which would be both laborious and tedious; so the next improvement would be to have the currency made of a substance which might be divided into any number of fragments, and each fragment represent a proportional part of the debt.

14. As soon as this idea was introduced, it would be obvious that the substance used for a currency should possess several qualities. It should be uniform in its texture, and easily divisible into minute fragments if required, and it should not be subject to decay. Taking the whole of these requisites into consideration, it is manifest that there is no substance which combines these qualifications so well as a *metal* of some description; because metal is uniform in texture, and it can be divided

into any number of fragments, each of which shall be equal in value to another fragment of equal weight, and if necessary these fragments can always be re-united and form a whole again of the united value of all its parts. By this means, if we can establish a relation between the *quantity* of the metal and the *amount* of the debt, then whatever that relation be, or whatever amount of metal be taken to represent any amount of debt, any fragment of such metal will always represent a proportionate amount of the debt.

15. In adopting such a metallic currency, it would be well to regard a quality in the metal selected for the purpose, that it should be scarce and difficult to be procured. Leaving out of the question, for the present, the useful purposes to which metals may be applied, which would introduce considerations affecting their value that are not necessary to be discussed in this place, we may say, that their relative, or exchangeable value, would be determined by exactly the same rules as those of other productions. The relative values of metals are ascertained by the amount of labour required to produce a given weight of them, and those that are scarce and difficult to be procured would bear a higher value than those which were abundant and easily obtained; that is to say, a given amount in weight of the former would exchange for a larger amount in weight of the latter. The greater the intrinsic value of the metal, the better is it qualified to perform the functions of a currency. All metals are heavy and inconvenient to carry, and if a very abundant one were selected for the purpose, the quantity which would be required to denote even a moderate amount of debt, would be a serious inconvenience. The more rare and valuable the metal, the more portable and convenient it would be, so that a man might carry about with him, as it were, a

concentrated essence of power of commanding services. Of all the metals that were first discovered, gold and silver combined these advantages in the greatest degree, and from the earliest antiquity, the most civilized nations appropriated them to that purpose; and they gradually superseded the inferior metals used by other nations, and their exchangeable value relatively to each other, as well as to other metals and commodities, was determined.

16. A metallic currency possesses another advantage over the one we described at first, which derived its value from the belief and confidence of the persons who received it that the debtor could perform his promise. That confidence would naturally exist only among his own neighbours, and at most among a comparatively small circle of persons, who had full opportunity of knowing the circumstances of the individual, and if the person who took it had dealings with strangers or foreigners who had no knowledge of the debtor, they would not receive such an obligation. Moreover, the service denoted by such an obligation, could only be demanded from the individual who gave it, and people in general would not be willing to give their services, when they could demand services in return from only one person. Now, a metallic currency is free from this objection, its utility was so evident to all who had commercial dealings, that they universally agreed to receive it in return for services. So that when a person receives an obligation expressed by a metallic currency, he is able to command the services not only of the original debtor, but also those of the whole of the industrious community.

17. The general consent of the whole nation, or of any number of nations, to receive this metallic currency in return for services, would not in any way alter its nature, nor could it have any value beyond those countries.

Consequently it would only perform the same functions as the paper currency, but in a wider circle, and upon an extended principle. Supposing that any nations had peculiar forms of their own, they could not have commercial dealings with each other, except by way of barter, that is, they would have to revert to the interchange of the services themselves, instead of their representatives, and would be somewhat similarly circumstanced to persons who could not communicate their ideas to each other through the medium of any common language.

18. There is clearly, then, no difference in principle between a metallic and a paper currency, only one depends upon a *wider basis of credit* than the other. A metallic currency is subject to its own peculiar disadvantages, because by its constant wear and tear, as it passes from hand to hand, it suffers considerably by abrasion, not to mention any bad practices that may be resorted to to lessen its weight, and as we have seen that the quantity or weight of the metal represents the amount of the service the owner may command, as the metal decreases in weight so does the amount of service it represents and can command gradually and correspondingly diminish. Paper is not subject to this intrinsic depreciation, so that if it were possible to have a paper currency, based upon the same credit, and which should be as generally received as the metallic currency, it would be a preferable form.

19. The paper currency we have described, would, in its simplest form, have the particular service, or production, it was intended to represent stated on the face of it. This, however, would manifestly limit its utility, so by universal consent instead of representing services or commodities directly, it is almost invariably usual to make the paper currency of a country represent a certain portion of the metallic currency, which is the generally received

representative of all services and commodities. Paper currency, therefore in modern practice, instead of promising that the debtor will render any amount of particular service, always expresses that he will give a certain amount of metallic currency either on demand, or at some fixed time.

20. The observations contained in the preceding paragraphs shew that the idea of "currency" is quite independent, and essentially distinct from that of "money," and that it would be quite possible to have a currency, though the refinement of money had never been thought of. If transactions take place between individuals, it is scarcely possible to imagine that there should not be debts, or balances of services due, arising between them, and this almost necessarily assumes the form of a currency. But it does not necessarily follow that there must be "money." If the method of conducting commerce by way of money, had never been invented, a grocer and a wine merchant might trade with each other. If they had agreed that a bottle of wine and a pound of tea should be considered as equivalents, the grocer might wish to purchase a bottle of wine, but if the wine merchant only required half a pound of tea, he would let the grocer have the bottle of wine, upon giving him a promise to pay the other half pound of tea whenever required. This note, if made transferable, would be *currency*, but it would not be *money*, because it has no intrinsic value. The difference between conducting commercial transactions, by way of barter, and by means of the intervention of money, is that in the former case they are considered directly as equivalents, in the latter they proceed upon the tacit assumption of the geometrical axiom, that things which are equal to the same thing are equal to each other. Now

money is that third thing which is used as the common measure, to which everything else is referred, and the superiority of the latter method of conducting commerce is so obvious and decided, that it has universally superseded the former among civilized nations, and currency has followed this change, and represents this common measure of value, and is often considered to be identical with it, though not correctly.

21. In the preceding paragraphs, we have endeavoured to describe the circumstances out of which the necessity for a currency arises, and its advantages and uses, and to arrive at a definition which may serve as a criterion to decide what is, and what is not, to be included under the title of currency. We have also endeavoured to trace the successive steps in generality it assumed from its simplest and most inartificial form, when it represented only a particular service, which could be demanded from a single individual, and available in a very small circle of persons, till it finally became a general power of the person who held it to demand any description of services from the whole industrial community.

22. In giving this description of the nature and uses of a currency, we hope we shall not be so far mistaken as to be supposed to allege that these were the actual steps in its progress. It is a trite remark that practice has always preceded theory. Thus language was universally used thousands of years before the laws of grammar were thought of. Poetry existed and Homer sung long before the laws of metre were devised. Æschylus, Sophocles, and Euripides delighted the Athenians with their immortal dramas, wholly unconscious of the canons of Aristotle; Oratory flourished before Rhetoric had a name; Temples were reared before mechanics were

understood, and so the natural instinct of mankind prompted them to use a currency long before its true nature was ascertained.

23. The metallic currency is termed *money* and the paper currency is strictly termed *security for money.* Some descriptions of paper currency are so perfectly secure that they are usually considered as money, or cash. Thus Bank of England Notes are usually designated as money, but that only arises from the perfect confidence reposed in the stability and solvency of that Institution, and it is better in such a work as this, to adhere to precise and accurate ideas. Bank Notes, then, whatever repute they may enjoy, are still only securities for money, because they contain a promise to pay so much money on demand, and it is only the belief generally entertained that the Bank can fulfil this promise if required, that gives them their current value.

24. We have seen that the substance in which persons record the debts or services due to them is called the currency, and is intended to facilitate the transfer of these debts; when it is applied to this purpose it is said to *circulate*, and hence it is often called the *circulating medium.* The amount of the sum total of all the transferences of the currency which take place, is properly called the CIRCULATION. Hence, a single piece of money may add considerably to the circulation, for every time it is transferred it is an addition to the circulation, though it is no increase of the currency. It is necessary to observe that this is not the meaning usually affixed to the word "circulation;" it is generally used as synonymous with money and bank-notes, more particularly the latter. Thus, the number of notes issued by the Bank of England or any other Bank, is frequently called its *circulation.* Of all the terms on this subject in ordinary use this seems

the most objectionable. To call the notes which circulate, the *circulation*, seems as great a confusion of idea, as to call a wheel a *rotation*. We shall accordingly never use the word circulation to mean the amount of the issues of a Bank, the more correct expression is evidently to say the number of its *notes in circulation*. We shall always use the words currency and circulation to mean different things, the first to denote the substance itself, the second the amount of its transferences from hand to hand. It is also clear that the currency and the circulation do not bear any fixed relation to one another, for there may be a large amount of currency in a country, yet if the industrial operations be few there will be a small circulation; on the other hand there may be a small amount of currency, yet if the people be active and industrious, it will pass frequently from hand to hand, and there will be a large circulation.

25. The use of a currency being to record and transfer debts, if we could imagine a great Public Book kept by the national authority, in which every one was entitled to record his services, which should be valued at a certain amount in figures, it would present the most perfect idea of a currency. For any one who had credit in that book, might require the services of another person, and give an order to the national book-keeper to transfer the figures denoting their amount from his own to his creditor's column. The book itself would be the record of the evidence of the debts, the total amount of the figures at the credit of each person would be the total amount of the currency in the country, and the transference of the figures from one column to another would be the transference of the debt, and would denote an operation, just as the transference of money from one person to another, and the amount of these transferences would be the *circulation*.

26. Gold and silver being useful for other purposes, besides serving for a currency, have a certain intrinsic value, and for that reason alone they are to a certain extent wealth in themselves. Many persons who cannot descriminate the simple ideas involved in one complex one, entertain very erroneous opinions on this subject, and are apt to consider *money* and *wealth* as convertible terms. Gold and silver however derive their chief value from their peculiar fitness to form a currency, and they are less useful for general purposes than almost any other metal.

27. Currency and commodities are things essentially distinct in their nature. Most writers consider that currency represents commodities, but this definition does not seem to be sufficiently accurate. Currency does not represent commodities, but an abstract right, or the power of demanding services in general, which may, or may not be, commodities. Now, transactions between individuals may be an interchange of things either of like or of unlike nature. When the interchange is of things of a like nature, such as currency for currency, or commodities for commodities, it is called an EXCHANGE, or in the case of commodities, frequently *barter*. Thus, we speak of the Foreign Exchanges, or the value of the currency of one country, in terms of the currency of another, or we ask for the change (*i.e.* the 'change, or exchange) of a £5 note, or a sovereign; so we speak of exchanging a picture for a statue, or one book for another. When the interchange is of things of an unlike nature, such as currency for commodities, it is called a SALE, and the one that gives currency is said to *buy* the commodity, and he who gives the commodity is said to *sell* it. Thus, we buy a horse, or a house, with money. The quantity of the currency given for the commodity is called its *price*, and

when the buyer of the goods transfers their stipulated price to the seller, he is said to *pay* for them.

28 The subtle question whether, if a fair exchange of goods were substituted for the payment of money, it was to be considered as a sale, was warmly debated for 150 years by the two famous sects of Roman lawyers, the Proculians and the Sabinians, from the time of Augustus to that of Hadrian. Both parties appealed to Homer in support of their views, but the opinion of Proculus finally prevailed that a *sale* and an *exchange* were operations essentially distinct in their nature. This was confirmed by the Emperors Diocletian and Maximian, and was ratified by Justinian, (Inst. L. III. c. 24). The conclusion was just, though the reason assigned for it was scarcely satisfactory, that "in the exchange of two things, it can never appear which has been sold, and which has been given as the price of the thing sold; and it is contrary to reason, that each should appear to have been sold, and that each should also appear to have been given as the price of the other." It would rather appear that when we exchange one commodity for another, we exchange one whose useful qualities are known, for another whose useful qualities are also known; that is, we exchange two things which are acknowledged to be equivalents. But the currency represents an abstract quality, or right; in changing a commodity for currency, we commute a known useful quality for an abstract right, that is, we give a commodity and receive in return only the power of obtaining an equivalent, or we exchange something that is definite for another that is indefinite, two operations which are essentially distinct, and it is better to appropriate different expressions to operations of a different nature.

29. Writers and speakers upon political economy

have differed widely from each other as to what is to be considered currency, chiefly, it is probable, because they never formed in their own minds any accurate and precise definition of the meaning of the word. We have endeavoured to ascertain the exact idea represented by the term, which will furnish us with a criterion to decide what is, and what is not to be included in it, and we have now to enumerate the different species of it in general use.

30. The amount of the currency in any country is the aggregate amount of it belonging to every individual. Now, whatever represents the amount of debt due to any individual, over and above his possessions in commodities, in whatever form that debt be recorded, whether metal or paper, or whether it exists simply as a debt, is the amount of currency belonging to him. Whatever therefore confers the power of demanding services or commodities, or professes to confer the power of demanding them, is the currency or circulating medium of any single person: and includes not only the current coin of the realm, but all its substitutes of every description, and whatever else represents or displaces it. Adopting this definition, we may enumerate the different species of it as follows:—

1. Coined money: Gold, silver, and copper.
2. Bills of Exchange, including Cheques.
3. Promissory Notes, including Bank Notes.
4. The sum standing at his credit in his Banker's books.
5. Private debts due to him.

31. The sum standing at his credit in his banker's books is clearly a portion of a man's circulating medium, or currency, because the figures represent sovereigns, and he can demand sovereigns for them, or he can at any moment convert them into a Cheque, which is a Bill of Ex-

change payable to bearer on demand, and is in all respects equivalent to a Bank Note, and is capable of performing the same functions. If it were necessary to adduce a judicial decision in support of this view, we might quote a recent case where a testator* bequeathed his "monies" to a legatee. It appeared that he had considerable sums in the London and Westminster Bank, both on a current account and a deposit account; for which latter, a deposit receipt was given. It was argued on behalf of the next of kin, that if not the money on the current account, at least, the sum on the deposit account should go to his next of kin, as the deposit receipt was to be considered as a mere *chose in action*, or security for money, but Stuart, V.C., held without hesitation, what it would certainly seem to require some ingenuity to doubt, that both these sums passed to the legatee under the word "*moneys*" in the will. Private debts are also strictly a portion of his circulating medium, in the same way as the figures at his credit in his banker's books, for they can be converted into a Bill of Exchange at the pleasure of the parties; nor does a debt due from a private person differ from one due by his banker, except perhaps in security. This is consonant to the phrase of the Romans for debt, which they called *æs alienum*, another man's money.

32. It is certainly true that some of these descriptions of currency are more eligible and secure than others; but they are all essentially of the same nature, and perform the same duties, with different degrees of advantage. The metallic currency rests upon its own intrinsic value, and the credit of the state, that it is of the proper weight and fineness. Paper currency, in this country at least, rests entirely upon private credit, and is of all possible degrees of security, from a Bank of England Note down to a

* Manning *v.* Purcell, 23, L. J. (1854), Chanc. 423.

gambler's I.O.U; and there are several different kinds of paper currency possessing more or less of a circulating power; but yet all these different descriptions of currency, though more or less eligible and secure, represent but one fundamental idea—*debt*. From these considerations it follows, that the amount of the currency or circulating medium in any country, is *the sum total of all the debts due to every individual in it.*

33. It might perhaps be objected to the opinion that a private debt is to be considered as currency, that it is called a *chose in action*, or mere right of action, by the Common Law of England, and is not assignable. But the reply to such an objection is that the non-transferability of debt is a local peculiarity of English law. The common law originated, before the rise of commerce, in ancient and barbarous times, when the feudal policy prevailed, and the non-assignability of debts was jealously maintained, in order to prevent the creditors of the Great Lords from assigning their debts to the Jews and Lombards, but when commerce sprung up and flourished, these barbarous ideas could no longer continue. The most perfect freedom in the assignment or transference of private debts is the very foundation and life-blood of modern commerce. This is effected by means of Bills of Exchange, and the whole system of Bills, Notes, and Cheques, is a direct violation of the Common Law, and we shall see hereafter that they were so regarded, when they made their first appearance in Westminster Hall. In some of the most modern States, like California, which have been formed since commerce attained its present development, debts are assignable precisely like Bills of Exchange. Owing to the extreme jealousy of the English Common Law of the transference of private debts, no man can compel his debtor to accept a Bill, but the case is different in

Scotland, where more enlightened principles upon more than one point in jurisprudence, prevail, a creditor can draw upon his debtor a Bill in the ordinary form, for the amount of his debt, and endorse it over to a third party, and that assignation is valid whether the debtor accepts or not, if the Bill is presented to him and protested for non-acceptance, 60 days before the bankruptcy of the drawer. Hence in dealing with the general principles of the subject, we must consider the non-assignability of debts in England as a mere local peculiarity, which does not affect the nature of the thing. The extreme impediment to trade, caused by the obstructions placed by the Common Law to the transference of private debts, was clearly seen by Sir Josiah Child, who has a chapter on the subject in his Discourse on Trade, and he even went so far as to wish not to leave it optional to the vendor and purchaser, in the case of non-payment of ready money, to leave the debt in a verbal state, but he proposes that it be enacted that every person whatever who bought goods and did not pay ready money for them, should be compelled immediately to give a Bill under his hand and seal for the amount with the time for payment agreed upon, which should be as transferable as money.* The law or custom of Banking is also an innovation upon the common law. The decision that regards a debt due from a Banker to his customer as "money," and the law which holds a debt due from any one else, as a mere *chose in action*, is one of those incongruities which mar the symmetry of our law, and which must necessarily abound in a body of law which is founded upon no scientific principles, but consists chiefly of a collection of arbitrary maxims, formed by unconnected and often contradictory accretions, added to it from time to time, without method or design.

* A New Discourse of Trade : by Sir Josiah Child. P. 126, Edit. 1698.

34. Mr. Henry Thornton, the author of the Inquiry into the Nature and Effects of Paper Credit, seems to have been the first to perceive that balances in the Bank were to be considered as part of the currency of the country; in his evidence before the Committee of Secrecy of the House of Commons in 1797, on the occasion of the Bank restriction, p. 94, he says, "Balances at the Bank are to be considered very much in the same light with the paper circulation." Almost all the witnesses examined before the Committee of the House of Commons, on Banks of Issue, in 1840, dissented from this opinion; but it is impossible not to be struck with the vague and unsatisfactory reasons alleged by them in support of it, and we may consider the question set at rest, by the case we have already quoted. This view of Mr. Thornton's is essentially true, and is of great importance, but it must be still further extended so as to include all other debts, because if they are not assignable at will by the creditor, by the law of the country they can always be reduced to the form of a Bill of Exchange. The same witnesses as mentioned above also excluded Bills of Exchange from the word currency, but if the definition of the word we have endeavoured to establish, be admitted to be the correct one, it necessarily follows that Bills of Exchange are strictly currency, though not of the kind calculated to cause the quickest circulation of it. We shall examine and reply to the arguments of those gentlemen for excluding Bills from the name of currency in a future chapter.

35. The quantity, however, of the currency that may be in actual circulation at any peculiar time, is a very different thing from the amount of it that exists. It might be well to distinguish the portion of it in circulation at any time, by some such name as the *visible or active currency*, and the remaining portion of it not in

circulation as the *latent or quiescent currency*. Many writers have missed this distinction, and argued about the currency in circulation, as if it were all that existed, and have involved themselves and their readers in an endless labyrinth of error, when they discuss the effect of the circulating medium on prices. We shall shew hereafter that the more perfect the Banking system is, and the more generally banking habits are diffused, the less is the amount of visible currency required to carry on any given amount of business. And we shall see that it is impossible to argue correctly upon the effects which an influx of gold is likely to have on the prices of commodities, unless we thoroughly comprehend the artificial state of the currency produced by the modern system of banking.

36. The definition which we have established of the nature of a currency, will furnish us with a criterion to decide whether certain things are currency, which may appear at first sight to be so, or at least to bear a close affinity to it. We may take Goverment Stock or the Public Funds, as the representative of the class, which includes Bank, Insurance, Railway, Dock, and other shares, and all that class of securities which appear on the face of them to represent money. There is no doubt that many persons who have held Goverment Stock, have intended to bequeath it in a particular manner, under the title of money; but the courts of law have uniformly rejected that interpretation, and held that stock is not included in money, though they expressed their regret in doing so, as they did not doubt, that if the testator could have explained his intention, he would have said that he meant to indicate stock, by the word money. Is, then, Goverment Stock and the class of securities of which it is the type, currency? The answer is that they are *not* currency. A railway share does not represent money, but

it is a certificate that the owner of it has paid a certain price for the purchase of a portion, or share, of the railway. The value of that share is estimated by the profits it is expected to produce. This share, then, does not represent currency, but an interest in property, the value of which is variable, and rises or falls according as the profits of it are greater or less; and similarly, Bank, Insurance, and other shares represent a certain interest in the property of those concerns. These shares are therefore to be placed in the same category as title deeds to property, and are not to be considered as money, or currency. And Goverment Stock is of exactly the same nature. The Public Funds are an estate or property, producing a certain known revenue, guaranteed by the public faith, and what goes by the name of stock, is a certificate that the owner of it is the possessor of a certain amount of this estate or property, and the value of this property varies according to the profits derivable from other investments, and from time to time, either exceeds or falls short of the price originally paid for it.

37. On the other hand, a bill of exchange or a bank note professes to represent a fixed sum of money, and nothing else; and the holder of such a security does not expect to receive either more or less money for it, than is stated on the face of it; but the holder of stock hopes or fears to receive more or less for it, if he sells it, according to a multitude of causes that affect its value.

38. It has been several times decided in the Courts of Chancery, that stock is not included under the word "money," more particularly by Lord Eldon, in the case of *Hotham v. Sutton;** and also in *Ommaney v. Butcher;*† and by Sir John Leach, in *Gosden v. Dotterill;*‡ a decision repeated and confirmed by Wood, V.C., in the recent case

* 15, Vesey, 319; † Turner & Russell; ‡ 2, L. J., (N.S.) Chanc. 15;

of *Lowe v. Thomas*,* much against his own wishes. In reading all these cases, we can scarcely entertain a doubt that the testators intended and thought, that when they were bequeathing their "money," stock was included in it. The judges, however, held otherwise, but they did not give any reasons for their decision, except precedent. The decision was certainly correct, and the explanation above given seems to furnish the reasons which prove its correctness.

39. A variation in the price of a bank note and Government stock, clearly illustrates the distinction between *depreciation* and *diminution in value.* A bank note professes to be worth a fixed amount of money, and if it will not purchase that amount it is *depreciated;* on the other hand, the value of stock is known to be variable, and if it be sold for less than was paid for it, it is *diminished in value.*

40. The ready convertibility into money of Government stock, has probably tended to aid this very general misconception of the nature of the funds. It is commonly said of persons, that they have so much money in the funds, and they are apt to consider this as money, whereas the more accurate expression is, that they hold stock of the estimated value of so much money. The public stocks are not security for money, like the paper currency, but they are to be classed under the head of *convertible security*, that is, security which is readily convertible into money at a short notice, or for which a purchaser can always be found, and of all species of property, they are the most readily convertible.

41. We have seen that a *quantity* of metallic currency represents an amount of debt due, or of the service it can command; and this relation being established, these

* 23, L. J., (1854,) Chanc. 453.

two quantities immediately have an exchangeable value, and a variation in the quantity of either would produce precisely the same changes in their exchangeable value, as any change in the relative quantities of any other two commodities. If commodities, or the persons who are anxious to render services, become unusually plentiful, while the quantity of money remains the same, they will diminish in value, or become cheap, on the other hand, if they become scarcer than usual, they will rise in value or become dear.

42. The simplest and most perfect form of a currency is that which represents nothing but transferable debt, and of which the material is of no intrinsic value, such as paper. It is only, however, when States have reached a high degree of civilization that they adopt this perfect form; before they attain that, the material of it entirely consists of something which has an intrinsic value, such as gold or silver. From this circumstance the purchase of an article with a gold coin is of a mixed character, and partakes somewhat of the nature both of a barter and a sale. But this intrinsic value is a secondary circumstance, and not the one which gives it its characteristic as a currency. It is its general reception as the visible symbol of transferable power, which is also called negotiability, which is the essence of a currency, and distinguishes a coin from a medal.

43. Currency, then, being merely the symbol of the power of commanding services, it is clearly not the possession of the currency, but the services he can command, that constitute the wealth of the possessor, and it is only as it represents these services that currency can be considered as wealth. Currency in its stagnant state is not wealth; sovereigns or bank notes lying idle in a box are no use to their owner, they are neither meat, nor drink,

nor clothing, nor fuel, nor shelter, nor anything else that is useful, but they are the proof that their owner has the right to get all these things when he requires them. We may consider currency to bear the same relation to wealth that the title deeds do to property. Title deeds prove the right of their owner to property, but no one would mistake them for the property itself, however expensively they might be prepared, or however costly the material of which they were composed. Moreover, they would be of little consequence so long as the property itself existed in a tangible form, and the possessor's right to it was generally acknowledged. The fewer the words, provided they were effectual, and the cheaper the material, provided it was lasting, the better would be the form of such evidence. The title deeds to property were considered of so little value by the common law, that they were not allowed to be a subject of larceny, and the thief could only be tried for stealing the box containing them, and some pieces of parchment, as it was held that it was the right to the property and its possession, which were the essentials of the owner, and not the mere evidence on a sheet of parchment. Just in the same way, it is the right and power of the possessor of currency to command the services of the community that constitute his wealth, and not the mere evidence of it contained in the currency he holds, and the less costly the material which contains this evidence, provided it be effectual for its purpose, the better it is.

44. So long then as the right to the possession is unquestioned, the title deeds are of little importance, so if debts were universally acknowledged, there would be little use for a material currency. If my neighbour acknowledges himself to be in my debt, and I know I can command his services whenever I please, what need

is there of any further evidence? what use of a material currency? but, if the right itself be unknown or forgotten, that would much alter the value of the evidence, for then this evidence is the only means the owner has to establish his right, and if the evidence be destroyed, the right itself is gone. In such a case, the title deeds may almost be confounded with the property it represents, and just as the memory of the right becomes precarious, it would be necessary to have the evidence of it recorded in some permanent form, to insure its endurance. Hence, though debts are the true wealth of their owners, they are so easily forgotten, that it is absolutely necessary to record the evidence of them in some permanent form, such as currency, in order to preserve the rights themselves, and the right itself and the evidence of it are so intimately connected, that they easily become confounded with each other in popular language.

45. A man who possesses a large quantity of the currency is usually said to be wealthy, and so he is, if we remember what wealth is, and consider him to be wealthy, because he is able to command a very large amount of services that may be useful to him, and not because he is the owner of so many pieces of gold, or paper, which in themselves can be of no use to him, and the way for a man to become wealthy is to render services to his neighbours by which he either obtains their services in return, or if he render more to them than he requires from them, the difference between them must be paid in currency, which he can use at any time, or which he can store up and bequeath to his posterity.

46. Whether a man becomes wealthy by rendering services to his neighbours, will depend entirely upon the nature of the services which he requires from them in return. If the service or commodity he requires from

them is in itself of a perishable or evanescent nature, he can never become wealthy, as if he requires from them tobacco to smoke, or wine to drink, or music, or things of that nature which perish in using; but if on the contrary, the service or commodity is of an enduring nature, such as land, or houses, or pictures, or statues, or cattle, or corn, or anything of a reproductive nature, or which is permanent and useful, then he does become wealthy, and he encourages the accumulation of national wealth.

47. In the opening paragraph, we stated that the quantity of labor bestowed upon acquiring each commodity would be the first circumstance which would determine its exchangeable value. But this would only be a first approximation, for if any of those commodities had any peculiar quality which rendered it more agreeable or useful than the others, it would be sought after with more eagerness. Thus, if venison were more savory than mutton, there would be a greater demand for it than mutton, and just in proportion as it was more in request the hunter would demand a greater amount of other produce in exchange for it, and its exchangeable value would rise. On the other hand, if nobody cared for mutton, the shepherd would not be able to induce any to exchange their productions for his, and it would have no exchangeable value, however much labor he had bestowed on rearing it. In a similar way, though in paragraph 15, we said that the quantity of labor required to produce a given weight of metal would be the first approximation to settle its exchangeable value, yet a short experience would shew, that some metals are more capable of being applied to a greater variety of useful purposes than others, and those which were most useful would be the most sought after, and their exchangeable value would rise; while that of those metals which were less useful, would fall, not-

withstanding the amount of labor necessary to produce them. Thus the Roman poet, in describing the discovery of the various metals, feigns that the men of the pristine ages were pleased with the beautiful appearance of gold and silver, and wished to apply them to the useful purposes of iron and bronze, but when they found that they were unfit for such uses, held them in little esteem compared to the harder metals. After dwelling on the uses of bronze, he says:*—

"Nec minus Argento facere hæc Auroque parabant
Quam validi primum violentis viribus Æris;
Ne quicquam; quoniam cedebat victa potestas,
Nec poterat pariter durum sufferre laborem,
Nam fuit in pretio magis Æs, *Aurumque jacebat*
Propter inutilitatem hebeti mucrone retusum,
Nunc jacet Æs, Aurum in summum successit honorem."

When the peculiar fitness of gold and silver to form a currency was afterwards discovered, it raised them to the great value they enjoy. From these examples it follows, that the exchangeable value of any commodity, or service, is a result compounded of its own intrinsic qualities, useful or agreeable, and the labor necessary to produce a given amount of it; and borrowing an arithmetical illustration, which is strictly applicable, if either of these quantities be 0, the result is 0.

48. The above considerations comprise all the elements which influence the exchangeable value of any production, and according as they are modified, the general result will be altered. They may be conveniently connected in an arithmetical form. Thus, if by "labor" we denote the labor necessary to produce any commodity; by "quantity," the quantity of it produced by that amount of labor; and by "utility" the quality which makes it

* Lucretius.—De Rerum Naturâ. V. 1268.

sought after, as well as the number who seek after it, it is clear that its exchangeable value will vary *directly* as the labor and utility, and *inversely* as the quantity: which may be thus expressed in an arithmetical form,

$$\text{Exchangeable value} = \frac{\text{Labor}}{\text{Quantity}} \times \text{Utility}.$$

49. We may extend the principle of these two simple examples further, to define the meaning of wealth in general. Though industry is the true source of all wealth, yet the result of all industry is not to be considered as wealth, but only that part of it which possesses qualities which make it sought for, or which gives it an exchangeable value. Industry bestowed upon objects which have no useful or agreeable qualities which render them capable of ministering to the wants or tastes of mankind, is not to be counted as national wealth. Thus, if a thousand men were employed in raising up a pile of stones,—though a great deal of industry were employed in effecting such a thing—as it would be of no use when done, it would be no addition to the wealth of the country, and it would be a great loss of resources to the person who caused it to be done. A similar argument will show that if any one expends his industry in producing a result which is less valuable than the labor bestowed upon it, he will lose resources *pro tanto*. If the result is only of equal value to the original industry, it will be no gain; and it is only when the result exceeds in value the labor bestowed upon it that it is an increase in wealth. The wealth of a country then, in our view, only consists of the productions of useful industry.

50. The Resources of a country are all those objects which, taken by themselves, are not wealth, but which are capable of being applied to the production of wealth. They comprehend, in the first instance, the objects upon

which industry, may be usefully employed, such as fertile soil, minerals, forests, &c.; secondly, the fund of industry which may be employed upon them; and thirdly, the power which puts that industry in motion, which is the currency. Neither of these three, taken singly, can be of any use; we shall always preserve a distinction between WEALTH and RESOURCES, the former being the production which is an end, or an object of desire for its own sake, the latter being the materials, or means, applicable to such purposes. But a judicious combination of the whole produces wealth. The currency is more properly to be regarded as one of the resources of the nation, rather than part of its actual wealth, because though industry has been bestowed upon its production, yet its production is only a means to an end, and not the end itself.

51. As the use of the currency is to set industry in motion, and inasmuch as it has no use except so far as it does that, its beneficial effects are not to be measured by its actual amount, but by the quantity of industry it generates. Money lying locked up in a box, cannot increase of itself, and only represents *latent* power, and not actual power. It may be called power or wealth in the latent state, and resembles the steam engine of a mill which is not going, and is of no use unless it is set in motion, and as the produce of the mill is measured by the quantity of the motion of the engine, so is the useful effect of the currency measured by the quantity of its motion, which we have called its *circulation*. Now, as this circulation, which is the sole test of its useful effect, is the product of its amount multiplied into the velocity of its circulation, it is clear that if by any means we can increase the rapidity of the circulation of the existing currency it will add greatly to its beneficial power, or if only a certain amount of business can be done, we may diminish the

quantity of currency necessary to carry it on by increasing its rapidity of circulation. Engineers usually call the quantity of motion of the engine its *duty*, so we may call the circulation of the currency its duty.

52. It is so essential to have a clear conception of the useful effect produced by any given amount of currency, that we may add another illustration. The effect produced by any body in motion is determined not only by its weight or mass, but also by its velocity, and the combined effect of its mass and velocity is called its *momentum*. If the mass be diminished, yet by increasing the velocity the result or momentum may still be the same. Thus, if a body of 100 pounds weight move with a velocity which we may call 1, its momentum will be 100, now if we diminish the weight to 50, and can double the velocity, the effect or momentum will still be 100, the same as before. The operation of the currency is precisely analogous to this. Its useful effect is the result of its combined amount and rapidity of circulation, which we have called the circulation. If we can make £50 circulate with twice the rapidity that £100 did before, the useful effect or circulation will be the same. Hence the circulation of the currency may be aptly compared to the momentum of a body.

53. As the useful effect, or the industrial operations promoted by the currency, does not depend solely on its amount, we may see how impossible it is to form any estimate of the wealth of a country by the amount of money or gold and silver in it. One country may abound in gold and silver, and yet be poor, and another may have comparatively little, and yet be wealthy. Spain was a country, in which, at one time, gold and silver were more plentiful than any other in Europe, and yet the more gold and silver were poured into it the poorer it became.

Adam Smith says that, except Poland, it was the poorest country in Europe. On the other hand, Scotland is the country which has the least amount of gold and silver currency, with the greatest comparative amount of wealth. The quantity of gold and silver currency in France is far greater than in England, yet England is much the wealthier country of the two; and there are good grounds for believing that the proportion of currency to industrial operations in England considerably exceeds that in Scotland. These examples show that the comparative amount of visible currency in different countries is no evidence whatever of the comparative wealth of those countries. On the contrary, it may be a proof of waste of wealth, that is, a waste of resources which might be better employed.

54. We have, in a former paragraph, restricted the term "wealth" to productions which are useful and necessary. If articles are produced which are not useful, and therefore not wanted, and if a greater quantity even of useful articles is produced than are required, it is a waste of wealth or resources. Now, if we revert to the example we considered of two persons doing unequal services to each other, the accounts between them may be settled in two ways, they may each pay to the other the full value of their respective services in coin; then it is clear that he who has done the greater service will receive back as much as he gave, and in addition to that, as much more as represents the excess of his service over the other; or the operation may be done much more shortly by balancing the two services against each other, and paying only the *difference* in money. The final result is the same either way, but we see that the quantity of coin which represented the smaller service has been totally useless, and the affair could have been much better settled without it. Now, as this coin represented no operation, it represented

no wealth, and more than that, it was actually a waste of wealth, for it required an amount of labor to produce it which might have been employed in producing something useful. This example will shew how great an advantage it is to economise the metallic currency as much as possible, and to have only just as much as is necessary to represent services which are not rendered in kind. If the people of one country conducted their operations entirely by the first method, and the people of another by the latter, we may see what a great difference in the amount of money would be required to carry on an equal amount of operations. Now, as we have classed currency, or money and its representatives, under the resources of a nation, the use of which is to set industry in motion, and to circulate commodities, if while a nation requires a certain amount of currency to carry on its operations in its usual manner, any new method be invented by which the purpose of currency is served to any extent, so that a portion of the existing currency is disengaged from its employment, it is clear that portion may be applied to promote new operations; and to the extent that it does so may be considered as an equivalent in all respects, to fresh and additional currency over and above that already existing. Hence the various methods of economizing the use of money are strictly to be considered as an increase of the *resources* of the nation. It is one of the great functions of a Bank to assist in such transactions, and to bring people together to balance their mutual debts, without the intervention of coin, and it will be shown hereafter how greatly the skilful employment of such methods economizes and develops the national resources.

55. From the circumstance of the currency being the means of acquiring or generating wealth, and gold and silver of which it is usually composed being the mea-

sure of value, a large class of persons have been unable to separate the two ideas, and have firmly believed that the currency was actually wealth, and some have gone so far as to think that scarcely anything but gold and silver was wealth. A considerable number of states have been blinded by the delusion that the only way to make a country wealthy was to accumulate gold and silver in it, and have framed their commercial policy with the express purpose of endeavouring to prevent anything but gold and silver being brought into it. This was called the mercantile system, and has been so admirably exposed and refuted by Adam Smith, that it would be inexcusable to go over the same ground again.

56. The quantity of currency a man possesses being the representative of the power he has of acquiring commodities, or demanding services from the community, he may employ it in two different ways. First—He may spend it in purchasing commodities for their own sakes, such as articles of necessary comsumption, or on such as give him enjoyment only, but no profit, such as pictures or statues, or houses, or a yacht, or horses to ride or drive, all these are forms of wealth, but they are not intended to be productive. Secondly—He may apply it to such purposes as will be reproductive, with the intention of bringing him an increase of wealth in course of time. When currency is employed in this method, that is when it is employed in producing articles which are themselves intended to be subservient to the production of other articles, it is usually called CAPITAL, and the use of the word Capital is also extended to apply to the article itself so produced to act as an agent in the production of others.

57. Most writers have drawn a distinction between capital as it is employed in two different ways. The object of the employment of capital is that it may replace

itself together with a certain increase or excess. This excess over the original expenditure is called the *profit* or *revenue*, and its magnitude or rate is estimated not simply by its absolute amount, but also by the time required to produce it. The standard of estimating the magnitude of the profit is usually the *year*, so it is said that the rate of profit is so much per cent. per annum. It is quite clear that when we hear that so much profit has been made by any operation, it is impossible to judge whether it is much or little, unless the time which it took to accrue is also given. If an operation produces a profit of 5 per cent. in three months, it is a very different thing to what it would be, if it took a year or more to produce that excess.

58. This return may take place in two different ways, it may either be effected in one operation, or by a succession of them; if the return be made in one operation, it is termed Floating Capital, on the other hand if it take place by a series of them, or by instalments, it is said to be Fixed Capital.

59. Now it is quite clear that if the return be made by one operation, it must include the whole sum necessary to replace the article, as well as the intended profit; but if the return be made by instalments at fixed periods each instalment must consist of a sum partly to replace the deterioration of the article itself during that period, and part to form the excess, or profit of the capitalist; so that at the end of the term, when the article is worn out, the sum of all these instalments should be sufficient to replace the original article, together with the profits.

60. When a man employs his capital in producing articles for the purpose of disposing of their use for ever, and obtaining the returns in one operation, he is said to produce them for *sale*, so he who purchases the use of an article for ever, and pays the price of it in one operation,

is said to buy it, but if he purchases the use of it only for a limited period, he is said to *rent* or *hire* it, and in the latter case it is usual to pay the price of its use by periodical instalments, and as the price he pays for it during that limited period, must replace the estimated deterioration of the article, as well as the proportion of the profits, it is quite clear that the more perishable an article is the higher must be the rent or hire paid for it during any limited period.

61. The words rent and hire denote exactly the same idea, only they are usually applied to objects which are considered to form different classes of property. Rent is generally applied to the purchase for a limited period of the use of what is called real or immoveable property such as lands, houses, and all property of a fixed nature; hire is applied to that of all moveable property, such as furniture, carriages, ships, and personal services.

62. Capital employed in producing articles which are meant to be sold, is called *Floating Capital*, but when it is employed in producing things which are meant to be rented, or to produce an annual revenue, it is called *Fixed Capital.*

63. It is clearly to be understood that it is according to the intention of the person who produces an article, and the purpose for which it is produced, that it receives either of these names, and not according to the nature of the article itself, and that the same article may receive different names according as it passes to different owners who produce it, or cause it to be produced for different purposes, so that the same article may be *floating capital* in the hands of one man, and *fixed capital* in the hands of its next possessor, if the first produce it for the purpose of selling it, and the second purchases it for the purpose only of deriving a revenue from its use.

64. This distinction may also be stated thus: that

if the whole price of the article is paid out of the current income of the country, it is floating capital; but if only the interest or revenue derived from its use, it is fixed capital. This distinction is often overlooked, and the term fixed capital is frequently applied to articles of a certain nature; and floating capital to articles of another nature. Thus houses and lands, machinery, railways, and ships, are frequently termed *fixed capital.* But this is extremely erroneous. If a person employs his capital in building houses for the purpose of *selling* them immediately, they are floating capital in his hands, for their price is to be paid in one operation out of the current income of the country; but if another man buys them for the purpose of letting them out to tenants, and so only deriving a revenue from his capital, they become *fixed capital* in his hands. Many persons buy land on speculation for the purpose of selling it again in smaller allotments at a profit; the land in the hands of these jobbers is *floating capital*, but if another buys that land for the purpose of letting it to farmers, or cultivating it himself, and so only making a revenue of it, it becomes *fixed capital* to him; so with machinery—to the machine maker who makes it for the purpose of selling it to the manufacturer, it is floating capital; in the hands of the manufacturer who buys it for the purpose of increasing the quantity of his productions by its use, and so only makes a profit out of it, it becomes *fixed capital.* Hence we may state generally, that all articles, whatever be their nature, while they are in the hands of a person who deals in them, that is, who produces or buys them for the purpose of selling them again as soon as he can, are *floating capital;* as soon as they pass into the hands of a person who only makes a profit by interest derivable from their use, they are *fixed capital.*

65. The articles we have just mentioned are, it is true, generally produced with the intention of their ultimately becoming fixed capital, but we have shown that they may or may not be fixed capital at the time they are produced, according to different circumstances, and unless we know what those circumstances are it is impossible to give either name to them. It may also be easily shown how articles which are usually classed as floating capital may become fixed capital. Furniture and clothes would usually be termed floating capital, because they are generally made for the purpose of being sold. But if a person made them for the purpose of only letting them out for hire, they would become fixed capital in his hands. An ordinary tailor usually makes clothes to be sold to his customers, so they are floating capital to him; but in the hands of Nathan, who lets out uniforms and dresses for particular occasions, they become fixed capital, just as much as a house or a mill. So if a cabinet maker makes furniture for the purpose of letting it out for hire, that furniture is as much *fixed capital* as any railway.

66. We thus see how improper it is to apply the term either of floating or fixed capital to any object, whatever be its nature, unless we know the intentions of its owner in using it. And unless an article is incapable of being applied to more than one of these purposes, it is not correct to call it by either name. There are very few articles to which the name of fixed capital may be invariably applied, none to which it is necessarily applied. Those to which it may be applied with the least risk of error are Railways, Docks and Canals. The instances are very rare when such things as these are made for the purpose of being sold; if that did happen they would have to be called floating capital in the hands of such a person or company. So that we may safely say

that there are no articles which are necessarily fixed capital. On the other hand there is a way of expending capital which it seems impossible can ever be anything else than floating capital, and that is the wages of labor. It is not very easy to conceive how the wages of labor can ever be classed as fixed capital.

67. To the capitalist who lives merely on the profits of his capital, it may make very little difference whether he reaps that profit in one operation or in many, as the result must be always the same to him in the end. But to the class of persons whose livelihood depends upon their daily labor, the workmen in his business, the difference in the method of employing capital is of vital importance. Thus, if the builder of a ship means it to be floating capital, that is, means to sell it immediately, and be paid the whole price of it at once, he will employ that money in building another ship, and the full amount of the price of the ship, deducting that part which goes to support himself, will be expended in the wages of the shipwrights and the producers of the materials for the new ship. But if the builder of the ship means only to let it out for hire and receive a periodical instalment for its use, he can only employ the part of that instalment which represents its deterioration in building a new ship, consequently if he changes the nature of his business very suddenly, that is, if he suddenly turns his floating into fixed capital, the fund applicable to the promotion of labor will be greatly diminished, and it must infallibly cause great distress among the persons who were dependent on him for their support. It might be that ultimately they might be as well off as before, but it is quite clear that if a large number of persons have been accustomed to have a particular kind of labour found for them, any sudden change by which the system is disorganised must produce at least

a temporary distress. It might be said that the capital of the purchaser of the ship, instead of going wholly to the builder of the ship, and being spent among that class of workmen, might be employed in encouraging other species of industry, so that the result to the whole community would be the same, but the overthrow of any system upon which a great number of people depend, must be followed by much suffering. It appears then, that the conversion of floating into fixed capital requires to be done with great caution, and only in certain quantities, to avoid its being injurious to the interests of large classes of persons. And if a large class of the public are seized with a sudden mania to convert an unusual quantity of their floating into fixed capital, it must inevitably be followed by severe public distress.

68. We have observed that if the owner of an article disposes of its use for ever, or sells it, the price should be sufficient to replace the article together with the usual profit; when he lets it for hire, the rent or hire is composed of one part for the deterioration of the article, and the other for the necessary profits. From this it follows that the more permanent the article is, the lower will be the rent of it compared to the price, because, assuming the profits to be the same, the deterioration is less during any given time. If it be of a perishable nature, the hire will be high as compared with the price, because the deterioration will be great. A few cases will verify this remark. The rent of land is very low as compared with its price, usually not more than 3 or 4 per cent., because the deterioration is very small; the rent of houses is much greater compared to their price, usually 7½ or 8 per cent., because the deterioration is greater; the hire of furniture is considerably more, usually 15 or 20 per cent., because the deterioration is greater still; and so on, so that the

rent must always be greater as the deterioration increases. The same consideration shews that the more flimsy and perishable a house is, the higher must be its rent, because it must be replaced in a much shorter time. This is one of the reasons which makes house rent so high in London, because the materials of which the houses are made are so perishable that they require replacing in a very short time. If they were built of such substantial materials as those of Edinburgh or Glasgow, it would probably reduce house rent to a considerable extent. It makes little difference to the houseowner what materials they are made of, as he must have his profits in any way; but it makes a great difference to the community at large, and we may see what an immense loss it is to the inhabitants of London, to have their houses built of such flimsy materials.

69. The word capital is more usually applied to money than to any thing else, but it is not correct to restrict it to that sense. Capital may truly be said to be anything which a man can trade with, or which helps him to economise labor or gain an income; any property or quality he possesses, which enables him to increase his wealth, any instrument however humble, or any contrivance however simple, which abridges labor and increases production, is truly to be ranked as capital. Thus, the tools of an artizan, together with his skill and industry, form his capital; the education and books, and the skill of the physician and lawyer, are their capital; the goods of a trader are his capital; the land of a landlord is his capital, which he cultivates, or lets out to farmers. So a good character serves as capital to many persons who can obtain the use of money or a situation from their known integrity.

70. No man in a civilized state can live without

requiring the services of his neighbours, and therefore, he must either expend his capital, which represents former services rendered either by himself, or by the person from whom he received it, or he must render new services to his neighbours in order to purchase them in return; and if such new services he renders exceed them which he requires, he is said to increase or add to his capital; on the contrary, if the services he renders fall short of what he requires, he must make up the difference by parting with a portion of the capital which represented his former services, and then his expenditure is said to exceed his income, or he is said to live upon his capital.

71. It is consequently every man's interest to put his capital into circulation, and this he may do in two ways: he may either purchase commodities which are capable of spontaneous increase, such as flocks and herds, which have a natural tendency to increase; or he may buy land with it, and sow corn, which has also a natural tendency to increase; or he may employ it in trade, and so gain profit by the usual course of trade; or he may render a service to his neighbours by allowing them the use of the power which the possessor of money has, and receive it back again after a certain fixed time, together with a certain fixed sum by way of equivalent for the value of the service, which is called *interest*, and, in either case, when a man employs his capital so as make it produce him a profit he is said to *invest* it.

72. Possessions of all sorts may be divided into two great classes, *wealth* and *resources*. By the former we will denote all such objects as men seek to acquire for their own sakes as being directly useful to them, and such as are not merely agents in the production of others; by resources, all such things, of whatever nature they may be, which are employed as agents in producing others, and

which are not directly useful, but only so far as they produce a profit. It is only necessary to consider what is the object of any particular thing, to determine under which head it is to be classed. It is absolutely necessary to understand clearly the distinction between these two classes of possessions, because it often happens that as one is increased the other is diminished. The wealth of a country is not to be estimated by the actual amount of commodities it has at any given moment, but by the power it has of producing any required amount in the shortest time, or by its command over production. This consideration shews the increase in the wealth of a country is not caused so much by having more commodities in it, as by an augmentation of its wealth-producing powers, or its resources. A country may often be the most really wealthy when it has the least amount of visible wealth. Since the introduction of railways, and the increased facilities of communication, it is probably not necessary to keep in store more than a fourth part of what was formerly requisite of many commodities. But the nation is far more wealthy on that very account. Though they are not in existence, any one who requires them can have them called into existence, far more easily than formerly. If an order be sent from London to Manchester for goods, they can be supplied in days now, where it would formerly have taken weeks. Hence the wealth of a country is not to be judged of by the quantity of goods it has in stock at any given instant, but by the speed with which it can supply any given demand. The very fact of a great abundance of stock may prove poverty of resource. If we see a canal with a multitude of reservoirs along its banks, we immediately conclude that the supply of water is apt to fail. People do not lock up a great deal of their capital in stock unless a failure of

resources is apprehended. If the supply of water is steady there is no need of reservoirs, so if the supply of goods is sure, there is no need of an accumulation of stock. Now, money is to be classed under the term resources. People of right mind do not seek to obtain money for its own sake any more than they build mills, or manufactories, or steam engines for their own sakes, but for the power they confer of producing commodities. No one would buy a cotton mill for the mere pleasure of possessing the machinery, as he would a house or a picture.

73. A country, then, which abounds with gold and silver coin cannot properly be said to be wealthy, any more than one which abounds with machinery; so long as these stand idle, the country must remain poor, like a manufacturing town in a strike. It is their motion or circulation which generates wealth, and the rapidity of that circulation which indicates the rate of increase or progress. This consideration will enable us to solve a question, which was long agitated by political economists and statesmen,—Which employment conduces most to national opulence? From the time of Colbert to the French Revolution, the question whether the towns or the country most conduced to national wealth was keenly disputed, and according as one side or the other prevailed, the one was encouraged and cockered, and the other depressed. Now, as the velocity of the circulation indicates the rate of progress, whatever employment causes currency to circulate with the greatest rapidity most augments national opulence. Currency is the engine of circulation, and industry its motive power, whichever species of industry drives the engine fastest, most rapidly augments the national wealth. Now it is well known that of all species of industry, agriculture causes the most languid circulation of the currency. By offering an extra

stimulus of reward the productions of human industry can be multiplied and quickened to an extraordinary extent, but the process of nature is slow and cannot be accelerated at command. Different trading pursuits cause a brisker circulation in different degrees, all much faster than agriculture. Hence a purely agricultural country must increase slower in opulence than any other, and other countries very much in proportion to the number of their inhabitants engaged in agriculture as compared to other pursuits. Experience amply verifies this remark. Poland and other countries which have few resources but agriculture, are the poorest and most barbarous in Europe. Great Britain and Holland, in which the smallest proportion of the inhabitants are engaged in raising food for the rest, are the wealthiest, and other countries very much in similar proportions. The instances are not many in which people have made fortunes by agriculture; but there is scarcely, probably, a small country town where some industrious and energetic individuals have not realized a competence by trading.

74. From the extravagant and mistaken ideas that prevailed as to gold and silver money being wealth, there are few nations which have not inflicted upon themselves incalculable mischief by their commercial policy. When the Spaniards discovered and conquered the gold producing districts of America, they thought that nothing but gold and silver was wealth. Dazzled with the brilliant prospect of becoming wealthy, without labor, they imagined that the whole of their well-being consisted in amassing enormous heaps of gold and silver, wholly mistaking the means for the end, and not discerning that the precious metals were only precious so long as they were used for setting human industry in motion, while they encouraged the tilling of land, the mother of increase, or

the building of ships to promote the intercourse of nations, or plying the loom to produce clothing for mankind.

75. It would be beyond the limits of this work to dwell upon their well-known policy and its fatal results. While the precious metals poured in, in boundless quantities, till the country was saturated with gold and silver, which the people of that day thought would make them the rulers of the world, it immediately began to decline in wealth, and continued to dwindle away, till at last she presents the melancholy spectacle we now see, when she is reduced to the lowest depths of weakness, poverty, dishonesty and contempt. Never has the world seen a country blessed by so many resources by nature, so suddenly and rapidly descend from so lofty an eminence to such a pitch of degradation; and it was emphatically wicked and unjust laws, and erroneous ideas respecting the value of gold and silver, that did it all. Spain fairly earned the eminence she attained to by her industry and energy, and nothing could be more useful or instructive to statesmen and people, to show how a great state may be ruined by evil legislation on such subjects, than a plain and simple history of the terrible catastrophe of Spanish grandeur. The legislation of this country was for a considerable period tainted with similar errors, though in a milder form, and they produced consequences the same in kind but less in degree, owing to the innate industry and indomitable energy of the people, who at last discerned their mischief, and burst their fetters.

76. The absolute amount of the currency compared to the services it represents, varies in different countries. When its proportion in one country greatly exceeds that of its neighbours, it is a very great evil, because the cost of producing anything in that country is so much higher than in the neighbouring ones that it is far cheaper to

import goods than to produce them at home, and so native industry languishes and dies. It was this cause, (joined to others which it is not necessary to speak of here) that destroyed the industry, and with it the power of Spain. The Spaniards endeavoured to counteract the evil effects which were so apparent by absolutely prohibiting the importation of foreign goods, so as to compel native production, and if it were possible entirely to exclude foreign commerce, the prices of every article being correspondingly raised, none would suffer. But this is wholly impossible; human nature revolts against it, the interests of mankind are arrayed against such a proceeding; the profit, and therefore the temptation, of smuggling is so great, that all men become smugglers. The instincts of men are so powerful in that direction, that no law or danger can restrain them, and the trade instead of being legitimate, merely assumes the form of smuggling. So it was in Spain, and so it continues to the present day. The chief trade of Spain is smuggling, and the greatest smugglers are the officers of the Government, and the most powerful men, and while the cotton goods of England were absolutely prohibited from being brought into the kingdom, they were notoriously sold in Madrid at about 30 per cent. dearer than in Manchester itself.

77. In England the currency is more abundant, in proportion to the services it can command, than in continental countries, so that the same evil consequences would be developed here, unless there were means taken to counteract them, and this is done by diminishing the cost of production. The instrument used for diminishing the cost is machinery. Powerful machinery produces the effects of thousands of men at an inappreciably small cost; hence this machinery will produce as much wealth as thousands of men, and this reduces the actual cost of the

production of any given quantity so much, that we can sell the commodities at a much lower price than any other nation. It was not the quantity of the gold and silver currency in the country that carried England through the last war, but the exhaustless power of her machinery. It was James Watt, and the ceaseless whirr of the Manchester mills, that produced the navies which swept the flag of her enemies from the ocean; and when the thunder-clouds of war gathered over her from all quarters of the horizon, enabled her to equip, and send forth, the armies of Wellington, to conduct away the tempest, to spend its violence on a foreign land. It was this inexhaustible wealth-producing power that saved the inhabitants of Britain from feeling the bitterness and horror of an Austerlitz, or a Jena, in their own homes, when

"Europe at large was a Province of Gaul;"

which arrayed the nations of Europe as her mercenaries at Leipzig,—and was the motive power of Waterloo.

78. The industrious classes may be divided into three different species: 1st, the wealth-producing class, such as farmers, manufacturers, artizans, and their dependants; 2nd, an intermediate class who redistribute the wealth produced by the first class; such as shopkeepers, dealers of all sorts, and bankers; and 3rdly, a wealth-consuming class, who produce nothing themselves, but seek to gain their wealth from that produced by others—these are soldiers, sailors, policemen, clergymen, doctors, and lawyers. All this class of employment is generated by the evils of our nature, and is employed in correcting it. It is for the interest of a state that these last should be as few as possible. Every one who enters into these professions, not only does not add to the wealth of the

country, but inasmuch as his industry might have been employed in producing or distributing wealth, it may be regarded as a positive loss. A certain number of the second class are absolutely requisite to distribute wealth in the most economical manner, and so are justly to be included in the capital of the nation; but it is the interest of the state to have as many of the first class as possible, for they are the foundation of its prosperity and power.

CHAPTER II.

ON THE THEORY OF PRICES.

DIFFERENT SPECIES OF VALUE—INSTANTANEOUS VALUE—CIRCUMSTANCES WHICH DETERMINE PRICE—GENERAL FORMULA—RELATION OF COST OF PRODUCTION AND VALUE—EXAMPLES ILLUSTRATIVE OF THE GENERAL FORMULA FOR PRICE.

1. The quantity of the currency that is given for any service rendered, receives different names according to the nature of the service. If the entire property of the thing purchased pass from the seller to the buyer, it is called its *price*. If the service consists only of the temporary use of anything it receives different names according to circumstances. If it is given for personal services, it is called *wages* or *salary*, or *pay*, or *fees*; for the use of property, *rent* or *hire*; and if for the use of money, *interest*. In all these cases, the money given for the service is determined by the intensity of the service rendered, together with the comparative power of the person who renders the service over the one who receives it.

2. The word *value* has received several meanings, according to the circumstances under which it is used. Many writers speak of two kinds of value of an article, one the intrinsic value, which is measured by the labor

bestowed on it, and the other as the *market or exchangeable value*, or the price which can be got for it in the open market. With respect to the first, we do not admit that the labor expended upon an article is a correct measure of its value in general, because the labor may have been bestowed without any useful purpose, it may have been misdirected and ill-judged, and therefore it may have been wasted, or more may have been employed than necessary, which must not be reckoned in estimating its value. We only admit, then, its true value to be the quantity of *useful* labor that has been expended upon it. Nevertheless, as people intend to have the whole cost of its production repaid to them, together with certain profits, we may call the value they think it ought to have, its *theoretical value*, and the sum it is really worth at any particular time and which it would command if sold by open competition, its *market value*. But it is clear that the latter will not include all cases where a sale takes place. Many transactions occur in which it is impossible to ascertain what the market value is. In fact, unless all commodities are brought into one focus, and all the purchasers come there to bid, it is scarcely possible to fix the market value of anything. Now as our object is to discover a rule which shall determine the actual cause of price, when a real transaction takes place, we are not concerned to consider what it might have been under different circumstances, but we require some more general name for the value, or the price given for an article in every transaction between buyer and seller.

3. To show how many transactions take place without its being possible to define what the market value is, we have only to consider the number of private sales that occur. A person may have a horse, or a picture, or a house, which he may wish to sell, and yet be very un-

willing to put it up to public sale, and so he may offer it about privately, and he may get several offers, all different, and who shall say whether any, or which of these, is the market value? The same quality of article may be offered for sale in several shops, and the price different in each, which of them can be said to be the market value? Again, it may often happen that the market value is merely nominal, and that no purchaser can be found to give the sum quoted in the public lists, as often happens in the very extensive description of property consisting of shares of all sorts, Bank, Railway, Insurance, and other public companies. These are generally quoted as being worth a certain price in the market, and yet their value is only nominal, because it may happen that no one will buy them, so that it is impossible to obtain the money for them which they are reputed to be worth. But the holder of such shares is frequently obliged by circumstances to part with them for what he can get, as in cases of bankruptcy, when it is necessary to force a sale. Now, if we wish to obtain a general rule, it must comprehend all cases of whatever description, in which a sale is effected, if it is to be of any service to us, consequently what we want is a name which shall universally express the price given for an article at the instant of the purchase. Sales may be either public or private, voluntary or forced, and we require a name that shall indicate the value of the commodity at the instant, and under the circumstances of any one of these cases.

4. There is a term in Astronomy which aptly expresses the idea we require, and which we may fairly borrow for our purpose. Theoretically speaking, the path of a planet round the sun is an ellipse, and if there were but a single planet not acted upon by any disturbing forces, this would strictly be its path. But instead

of one there are a great number moving simultaneously in their own path, and they all act upon each other as disturbing forces, to drag each other out of their theoretical paths. It is found that though a planet moves in an ellipse, yet the position of that ellipse is constantly changing, owing to the mutually disturbing forces, so that it never moves in the same ellipse for two consecutive seconds of time, and the calculation has to be made, not for its position in the theoretical path, but for the ellipse it will be in at the instant required, and this is called the *Instantaneous Ellipse.* Now the prices of a great number of articles, especially those of general consumption, and several other descriptions of property, vary from day to day, and from hour to hour, from a multitude of causes, which cannot be foreseen or controlled, and the price, in each separate case when a transaction takes place, is determined by the relative positions of the buyer and seller at that particular instant, and not by what the value of the article might be under other circumstances. Hence we may fairly call the price actually paid in any transaction, the INSTANTANEOUS VALUE, and this name is of a far more general nature than the other two, and will include them.

5. When a great amount of power is contained in a small space, the effect produced by that power is said to be very *intense.* Thus, if a great quantity of light proceeds from a small luminous surface, it is called an intense light; so also we speak of an intense heat, or an intense pain, intense excitement; and in a general way, when we speak of different degrees of power in a given space, we measure them by their relative intensity.

6. We may in a similar manner speak of services of different degrees of intensity, according to the circumstances under which they are done. The very same

thing may be of far more use to a man at one time than at another, and hence from the analogy of the cases, we may call it a service of greater or lesser intensity. Thus, if a man who had just eaten a sumptuous dinner were offered a crust of bread and a cup of cold water, they might, being presented at such an unseasonable time, excite a feeling bordering upon disgust in him, but if the same man were left alone on a desert island, in the last gasp of starvation, or in a caravan on the sands of Africa, overwhelmed with heat and thirst, with what different feelings would he receive the same food, how he would bless the giver, and if the latter chose to be hard-hearted and had no competitor, he might also compel the man in his extremity to give him any price he pleased for this service. In these two cases the act done was precisely the same, but the value of the act was very different, and we may call the service done in the latter case one of much greater intensity than in the former.

7. Or we may suppose a vessel to founder at some distance from the land, leaving only a small portion of the mast above water, to which a passenger might cling. If a boatman were to row off to him from the shore, he might exact almost any price he liked to save his life. Now the fact of rowing a man a mile or so in a boat would be no great thing taken by itself, but under the circumstances of such a case it would be of very great value, and so it would become a service of great intensity. If only one boatman came off to save the drowning man, not only would the service be one of great intensity, but he would be absolutely in the power of the boatman, and must yield to his terms, however cruel or exorbitant they might be. But if two boatmen, instead of one, came off, they would probably bid against each other, and the price be reduced, because they would both be eager to gain by

rendering the service. The service, however, to the drowning man, would be of the same intensity whoever did it, though he would be less in the power of any one boatman if there were two or more competitors to render it. Now the effect of the intensity of the service rendered would be to raise the price of the service, and the effect of the one boatman having complete power over the drowning man would be, to raise it still more; but on the contrary, the effect of there being two or more competitors to do the service would be to diminish the power of any one of them over the receiver of it, and would consequently diminish its price. The price of every service rendered consists of these two elements, viz: the intrinsic value, or the intensity of the service itself, which we may also express by the necessity of the person who requires it, and the power of the person who renders it, over the one who receives it, or we may say that the price varies as the intensity of the service rendered and the power of the seller of it.

8. We may express this in rather a neater form. If the price increases according to the power of the seller, it must diminish according to the power of the buyer. Now, prices are a continual contest between buyer and seller, and these are the weapons with which the respective parties are armed, on the one side the intensity of the service to be rendered, or the necessity of the person who requires it; on the other, the power of the person to choose among a greater or less number of competitors to render it. These are the two elements which in their ceaseless conflict determine the price at the point where they meet and neutralize each other, and as one prevails over the other the price advances or recedes, as the foam at the meeting of opposing tides is born backwards or forwards according to the varying force of each.

9. The rule, then, which determines price may be expressed in this way. *Price varies directly as the intensity of the service rendered, and inversely as the power of buyer over the seller*, which may be thrown into an arithmetical form, thus,—

$$\text{Price} = \frac{\text{Intensity of service rendered.}}{\text{Power of Buyer over Seller.}}$$

This expression properly interpreted will be found to be of universal application, and to comprehend all transactions of whatever nature they be, whether by way of wages, rent, or price, of which we shall give a few examples.

10. It has often been said that the value of an article depends upon its *cost of production;* thus, the late Mr. Ricardo, in speaking of corn, said that the "cost of production did not the less vary, and that must regulate the price,"* and again, "no principle was more true than that the cost of production was the regulator of value, and that demand only produced temporary effects." A little observation shews that this measure, however plausible in theory, is so rarely practically true as to be of little service. If it were true, it would mean that a perseverance in producing any article at a great expense, if continued long enough, would in the end succeed in raising its value, whereas it is quite clear that if it were produced in greater quantities than required, its value would infallibly fall, and it may very easily happen, that while the cost of production increases, the value diminishes. The value of an article depends not upon the cost of its production, but upon the necessity which the purchaser has for it, at the time of the purchase, or the degree of benefit it renders him. Thus, in the instances

* Hans. Parl. Debs., new series, vol. vii. p. 949.

above mentioned, when a crust of bread is given to a famishing man, who had no other resource within his reach, what appreciable proportion did the cost of the crust of bread bear to the value of the service rendered? Absolutely none. Just in the same way, in the case of the boatman saving a man from a wreck, what would the value of the hire of the boat for an hour or so be, compared to the service rendered?

11. It would appear that the only correct way of viewing the matter is to consider price as a perpetual struggle between the buyer and the seller, and the circumstances which compel one party to yield are the only measure of value at the time of the purchase. To say that the cost of production regulates price is only true in this sense, that no man would willingly sell any article he had produced, at a less price than that, together with something additional by way reward for his own labor, and he could not continue to do so for any considerable time. But having settled that at the lowest limit in his own mind, he always endeavours to get as much *more* as he can, without the smallest reference to the cost of production, and how much more than that he can get is determined by the rule we have given above, namely, by the necessity the purchaser has for that particular service, together with the number of competitors to render it. On the other hand the purchaser cares nothing for the cost of production, his only object is to buy as cheap as he can; and he takes no thought whether the seller is selling at a loss or not. The result of this will be that if the selling value of any article falls below its cost of production for a length of time, it will cease to be produced. Every man endeavours to produce as cheap as he can, and to sell as dear as he can, and the two operations are quite independent of each other.

12. We have said that the formula arrived at in Section Nine will determine the purchase money of service in every case, and we will now take a few examples. In the first place take the wages of labor. This rule shows why the wages of a skilful workman are so much higher than those of an ordinary one, because the work being of better quality, it is a service of greater intensity, and the skilful workmen being comparatively few, the employer is more restricted in his choice, and so his power over them diminishes, and he must yield to their terms to a certain point; but if he were to go beyond a certain point, he knows very well that the value of the article when produced will not be sufficient to cover its cost of production and the necessary profits, so rather than exceed that point, he will not produce the article at all. On the other hand, the skilful workman must live, and he knows that the employer cannot give beyond a certain price, and he is obliged to yield rather than starve; so these circumstances determine the rate of labor or wages. But if the number of skilful workmen increases, he has greater power over them, and the wages of their labor fall. Thus it is universally observed that when some new invention comes out, the article produced is high in price, because so few can produce it, and so many require it; as soon, however, as it becomes better known, and more can produce it, the price of it falls, though the workmanship is in no whit inferior, and this is because there being more competitors for purchasers, the power of the purchaser over each of them increases.

13. It was a doctrine long maintained, even by respectable writers, that the wages of labor were in proportion to the price of food, but there never was a more fallacious idea. If the wages of labor depended upon the price of food, it would necessarily follow that the wages

of all trades should rise and fall together. But it is notorious that such is not the case, for it frequently happens that while one trade is enjoying great prosperity, another is greatly depressed. It is often remarked that those towns where a great variety of trades are carried on, are most uniformly prosperous, because the probability is that if one trade is doing badly, others are doing well, and it seldom happens that all trades are simultaneously depressed, whereas those towns in which only one trade is carried on are subject to alternate fits of great prosperity and great depression. The wages of labor, however, in each trade are determined by the circumstances of that particular trade, though it is often the case that particular circumstances may affect several different trades simultaneously.

14. So far is it from being true that a rise in the price of food causes a rise in the rate of wages, that the effect is generally the reverse, and a rise in the price of food depresses wages. When the community at large has to pay an enhanced price for their food, which is an article of prime necessity, they have less to spare for clothing and other goods. These being less sought after, will diminish in value, consequently as the manufacturer cannot get so much for his goods, he must either diminish the cost of their production, or cease to produce. He must either force down wages, or shut up his mills. So that the necessary result of a considerable rise in the price of food is a fall in wages. That this is the case in manufacturing districts is too notorious to be disputed. Now the wages of labor in this case depend entirely upon the relative necessities of the workmen and the employers, and their relative power over each other. The workmen will of course resist a fall in wages as long as they can, but if the master cannot reduce them to a certain rate, he

cannot repay himself for his outlay, so that if the workmen refuse to work for those wages he must shut up his mill; but if the workmen cannot find employment they must starve, so they must at last consent to the master's terms. On the other hand, when there is a good sale for the master's productions, he is anxious to supply this demand and realize profits, and the workmen soon find this out and refuse to work unless for higher wages, but in this case there is also a limit which the masters cannot go beyond, and there he takes his stand as before, and the workmen must yield. It sometimes happens that the workmen are so misguided as to think that by increasing the price of their labor they can force up the market value of the article, which erroneous idea has given rise to a great number of unhappy proceedings, so well known as "strikes," in the manufacturing districts. These strikes have repeatedly happened, both when trades have been in a state of great depression, as well as when they were prosperous; in the former case when the masters found it necessary to reduce wages, the men combined to resist the reduction; in the latter case, when the men combined to raise their wages, and the masters resisted them, so that the men struck to compel the masters to yield. From these examples, as well as others which will be adduced, it will be seen that instead of the cost of production regulating the value of an article, it is frequently its value which determines the cost of production.

15. Hence we see that wages or the price of labor are determined by the value of the service at the time it is rendered. If there is a great demand for goods, there is a greater demand for men to make them, and every master who has orders to execute is anxious to engage men to enable him to do so, and the inevitable consequence of this is to give the men a greater power over their em-

ployers, and enable them to raise their demands, and the masters can well afford to do so, because though by the rise of wages their profits upon each individual transaction may be diminished, yet from the greater number of operations their profits are increased upon the whole. On the contrary, when the demand for goods falls off, and the quantity of the work to be done is diminished, there are so many workmen to do it, that each is anxious to secure a share of it for himself, and then the power of the masters increases over the men, and they are enabled to reduce wages, nay, they *must* do so in self-preservation, because the number of their operations being reduced, the profit on each must be increased, to enable them to live. Now, when is it that the demand for goods increases? Common sense and universal experience reply, when the price of food is low, for then the people are able to indulge in other luxuries, and give a spur to labor; on the contrary when food is high they have less to spare from food, which is an absolute necessity to them, and they must curtail their expenditure on other articles, so that there is less demand for labor, and in the natural order of things, the price of it falls because the power is diminished. The history of prices in this country will be found to confirm the truth of these observations, never was the price of labor so high as when food was cheap, on the contrary as food rose the price of labor fell. These fluctuations in wages, produced by causes which were ill understood, alarmed and irritated the workmen, and opened an unfortunate field for a number of designing knaves to prey upon their ignorance and misery.

16. It is not surprising that ignorant and uninstructed workmen should fall into this mistake, when we see persons of much better education commit precisely the same error. The fundamental error which brought about

so many of these unhappy strikes was, what has been said by persons of repute, that the cost of production of an article regulated its price. Many of these strikes were the nothing more than the attempt to carry out to their practical and logical conclusions the doctrines which eminent political economists had enunciated with applause. The workmen thought that by combining to raise the price of their labor they could force up the price of the article. But these proceedings have invariably ended in failure and disaster to their authors, for they neglected to take into their calculation the necessity the public had for the article, and their means of supplying themselves with it elsewhere, which are essential elements in determining the price.

17. It is no doubt true that there is a limit below which the wages of labor cannot fall for any permanent time, and which is determined by the price of food, but this only relates to the very lowest, rudest, and most unskilled species of labor, and even that limit has happily never yet been reached in England, because it depends upon the lowest, cheapest, and worst kind of food capable of supporting man. The poorest laborer in England has now wheaten bread to eat, such as probably, in the mediæval ages, for which there has been lately such a ridiculous enthusiasm, a nobleman could not obtain. If such bread as is usually consumed in many a nobleman's house on the continent were given to the inmates of an English workhouse, it would infallibly cause a riot. The lowest class of laborers have fortunately never been reduced to such a point continuously, though it may sometimes happen that when work is scarce, they can earn very little, and then they may be driven to receive relief from public or private charity, which takes them out of the operation of the law of supply and demand. It is also

universally observed that when the price of bread rises very high, the wages of the lowest class of laborers never rise in any like proportion. The way of raising the wages of labor, then, is not by raising the price of food, but by diminishing the number of competitors for it, for it is the number of competitors compared with the quantity of work to be done, that influences the price of labor, far more than any variation in the price of food.

18. Persons who engage in trade must live by their trade; they must, therefore, necessarily charge their customers such prices as will enable them in the long run to support themselves out of the profits. Hence, when transactions are trifling in number and magnitude, they must charge very high prices in order to enable them to live. But when the transactions increase in magnitude and number, they are enabled to reduce the profits upon each, and lower their price. It is this circumstance that compels small shopkeepers in rural districts to charge such high prices for their goods, to the great indignation of many well-meaning but unreflecting persons. It is not uncommon to hear such persons exclaim against what they call the extortionate charges of country shopkeepers, quite forgetting that if the traders cannot make a living out of their business, they must give it up altogether, and the people be totally deprived of the convenience.

19. It has sometimes happened that gentlemen, having plenty of other means to back them, have established rival shops for the express purpose of beating down the prices of the country shopkeepers. The consequence has been that the traders who had nothing but their business to support them have been ruined, the gentleman in process of time either got tired of his whim, or for other reasons abandoned it, and the germ of a nascent trade in a district destroyed, a pregnant example of the Spanish proverb,—"Hell is paved with good intentions."

20. Hence we see that a multiplication of transactions, and an increase of their amount, has a tendency to lower prices. Nowhere are rents so high as in the city of London; and nowhere are prices for ordinary goods so moderate. Goods in the City are in many cases 25 per cent. cheaper than in the suburbs, and this is not entirely the result of competition, which is equally active in the one as in the other, but is the result of the great number and magnitude of their transactions. The profits upon each transaction are much less than a country shopkeeper receives; but it is found, that a small profit upon a large and rapid circulation of commodities leads much faster to opulence, than a large profit upon a small and slow circulation. Instead of the grasping rapacity which formerly used to make as great a profit as possible upon each transaction, modern experience demonstrates that the true axiom of trade is *small profits and quick returns.*

21. It is no mere speculative opinion that a general and long-continued low price of corn is not only not necessarily accompanied by a low rate of wages, but most probably by the very reverse. The most remarkable continuance of generally fine seasons and abundance of corn ever known occurred in the last century. For the extraordinary period of sixty-five years, from 1701 to 1766, there was, with a few exceptions, a continued series of plentiful harvests. The average price of corn for that period was 16 per cent. less than the average price for the preceding century; but notwithstanding that, the price of labor rose greatly during the same period, and, what was least to be expected, *agricultural labor rose* 16 *per cent.* Mr. Tooke says,* "The fact, indeed, of a rise of money wages in this country, coincidently with a fall in the price of corn during the long interval in question, rests on

* History of Prices. Vol. I. p. 55.

unquestionable authorities;" and, says Adam Smith, "In Great Britain, the real recompence of labor, it has already been shewn, the real quantities of the necessaries and conveniences of life which are given to the laborer, has increased considerably during the course of the present century (*i. e.* the 18th). The rise in its money price seems to have been the effect, not of any diminution of the value of silver in the general market of Europe, but of a rise in the *real price of labor* in the particular market of Great Britain, owing to the peculiarly happy circumstances of the country;" and, "The money price of labor in Great Britain has indeed risen during the course of the present century. This, however, seems to be the effect, not so much of any diminution in the value of silver in the European market, as of an *increase in the demand for labor in Great Britain arising from the great and almost universal prosperity of the country.*"* In the latter part of the century, the price of wheat rose enormously in consequence of a long succession of bad harvests, but there was no corresponding rise in wages.

22. Mr. Ricardo says,† "Labor, like all things which are purchased and sold, and which may be increased or diminished in quantity, has its natural and its market price. The natural price of labor is that price which is necessary to enable the laborers one with another to subsist and perpetuate their race, without either increase or diminution." "The natural price of labor depends on the price of food, necessaries, and conveniences required for the support of the laborer and his family. With a rise in the price of food and necessaries, the natural price of labor will rise; with a fall in their price the natural

* Wealth of Nations. Book I. ch. xi., Vol. II. p. 91. Wakefield's Edition.

† Principles of Political Economy and Taxation. 3rd Edition, p. 86.

price of labor will fall." "The market price of labor is the price which is really paid for it, from the natural operation of the proportion of the supply to the demand; labor is dear when it is scarce, and cheap when it is plentiful. However much the market price of value may deviate from its natural standard, it has, like commodities, a tendency to conform to it." A little examination will shew how vague and inaccurate the ideas in these sentences are. What are the *natural* food, necessaries, and conveniences of a laborer? The standard varies in every country. Are we to take the wheaten standard of England, the oaten standard of Scotland, or the potatoe standard of Ireland? or the black rye bread standard of Poland? Which of these is the *natural* standard? Wages in the West Riding of Yorkshire used to be 14s., in Dorsetshire 7s. a week, which of these was the *natural* standard? A little reflection will shew that the idea of a natural standard is a mere chimera. The same principle determines the rate of wages in each of these cases; it is the proportion existing between capital, employment, and laborers in each locality. What made wages so low in Ireland and Dorsetshire? The abundance of laborers, and the scarcity of capital and employment. What made wages so high in Yorkshire? The abundance of capital and employment, and the scarcity of laborers. If any cause produces a change in the relative proportions of these three elements, a change in the rate of wages necessarily results. Since the famine and emigration have relieved Ireland of the superabundance of laborers, wages have risen greatly. Emigration has produced the same effects in Dorsetshire, and if the same proportions as now exist between these three elements be preserved, the ordinary rate of wages will continue as at present. We see, then, the extreme inaccuracy of speaking of the natural price

of labor. What Mr. Ricardo means by the natural price is nothing more than the usual market price, which has been produced by a long-continued steadiness in the proportions between the elements of wages, but if any causes change that proportion, the ordinary market price changes with it. Hence we see that the relation of supply and demand is the sole rule that governs wages.

23. It is far more generally true that it is the value of the article when produced that governs the cost of production, than the contrary rule. It is true that it is often said that the prices of goods are raised because wages have risen,—as was the case with the iron trade last year—but then what was the cause of the rise of wages? Simply a greater demand on the part of the public for articles of iron, for ships, for rail-roads, steam-engines, &c. It was this original demand on the part of the public for iron that raised the price of labor, and the rise of wages reacted upon the price of iron. The producers of iron articles were able to raise their price to the public because there was a great demand for them. The demand by the public increased faster than it could be supplied. If the increased supply required could have been furnished as quickly as it was wanted, there would have been a rise in wages, but not in the price of the article itself. Hence the true cause of the rise in the price of the article was not the rise in wages, but the demand for the manufactured article increasing quicker than it could be supplied. Since then a great revulsion has taken place, the price of iron has fallen 30 per cent., and wages have been reduced; but was it the reduction of wages, *i.e.* the cost of production, that caused the fall in the price? certainly not, but it was the fall in the price caused by a diminution of the demand compared to the supply, that compelled a reduction in the cost of production or wages.

24. We may instance another class of cases, where it is equally incorrect to say that the price depends upon the cost of production. It has often been said that the value of gold depends upon the labor of producing it, but we cannot accept this as a correct statement. When gold is found, there is no greater labor in producing it than any other metal. Ricardo says,* "Gold and silver, like all other commodities, are valuable only in proportion to the quantity of labor necessary to produce them and bring them to market. Gold is about fifteen times dearer than silver, not because there is a greater demand for it, nor because the supply of *silver is fifteen times greater than that of gold, but solely because fifteen times the quantity of labor is necessary to produce a given quantity of it.*" Such an assertion as that it is fifteen times more expensive to obtain gold than silver carries its own refutation on the very face of it, and is just one of those tests which, being inconsistent with a known truth, proves the fallacy of the whole of Mr. Ricardo's argument. A gold mine is not more costly or laborious to work than a lead, or tin, or copper mine. But it is a much *scarcer* metal than any of the others, and it is extremely useful for certain purposes. It is not the greater amount of labor bestowed upon producing gold that gives it its greater comparative value to silver, but its greater comparative scarcity to that metal. So far from its being true, as Ricardo says, that the supply of silver is not fifteen times as large as that of gold, the fact is that until the discovery of California and Australia, the supply of silver was forty times as great as that of gold;† the reason why, when it was forty times more abundant, it was only fifteen times less valuable than gold, will be

* Principles of Political Economy and Taxation, p. 421.

† Macculloch's Commercial Dictionary. Art. Precious Metals.

shewn a little further on. This known fact, being contrary to Ricardo's assertion, is fatal to his argument. If gold were as abundant as silver, it would be much more convenient to have silver coin than gold ones, as an equal quantity of silver would be much lighter and more convenient to carry than the same quantity of gold. It is in fact the peculiar qualities which render gold so useful as a currency, that give it the greater portion of its value.

25. Thus, also, the value of diamonds and other precious stones depends entirely upon their rarity, and has no appreciable relation to the labor of finding them. They have acquired a certain estimation in the eyes of men for certain qualities they possess, and they are scarce, and it flatters the pride of men to be the possessors of rare articles. The finding of diamonds is a great hazard, and they are only found in few places, and of certain sizes. If a few persons were to be so fortunate as to discover a few hundreds of diamonds of large size, their value would be immensely diminished all over the world; nor would it be possible to assign what proportion the labor of producing them would bear to their price; on the other hand were a million of men to devote themselves to search for them, and if they searched in vain, and found none, that circumstance would not have the smallest effect in raising the value of a single diamond. So that the real truth is, that men are willing to devote themselves to searching for diamonds, because they are of great value when found. Thus also, pearls are not dear because so many fishermen seek for them, but so many fishermen labor to find them, because they are highly esteemed, and rich people are willing to pay high prices for the pleasure of possessing them, and though a man may only find a diamond at rare intervals, the value of it is so great when found, that it will repay him for a long course of unsuccessful labor.

Hence we may say, that it is true of gold, silver, diamonds, and pearls, and all that class of productions, that a great deal of labor is bestowed on producing them, because a high price is given for them, and that it is a mistake to say, that a high price is given for them, because a great deal of labor is bestowed on producing them.

26. The different value of houses according to the locality in which they are built, well exemplifies how greatly more surrounding circumstances influence the value of an article than the cost of its production. It would not cost more to build a house, or a range of offices in the heart of the City of London, opposite the Bank of England, or the Exchange, than in the most unfrequented suburb, but of what different values they would be! Now, it is clear that the greatly augmented value of the building in the City would be almost entirely due to the great demand for offices in that locality, and would have no reference to the cost of its production. Nay, so much is value affected by external circumstances, that a house or a shop will be far more valuable on one side of a street than on the other, as it may be more fashionable or sunny, or the reverse; so apparently minute are the circumstances that cause great differences in value. Again, an unexpected change in the fashion, which is merely another name for the demand suddenly ceasing, causes the most violent depression in the value of the most expensive articles. A few years ago a species of carriage called *chariots* were the most fashionable of any—now there are very few remaining, and a good chariot which in former times would have cost several hundred pounds, would not now fetch more than a few pounds, the mere value of the wood and iron, because they have been superseded by more convenient forms of carriages. These examples are sufficient to show how erroneous it is to think that

the value or price of an article can be controlled by its cost of production.

27. It is quite easy to shew that the value of an article may diminish, as the cost of its production increases. Let us take the example of a ship, as that will illustrate this principle as well any other. The value of a ship at any given time, (omitting the question of how long she may last,) is measured by the amount of freight she can earn. If the demand for ships be great and the number of them few, the value of shipping will of course be high; but if the number of ships be increased, while the demand for them remains the same, the value of each will be diminished. Now, if the value of ships be high, it will naturally cause a greater number to be built, which will stimulate industry in that trade, and certainly cause an advance in shipwrights' wages. Thus the cost of production of each ship will be increased, while each new ship that is built will diminish the value of the whole; and the more that are built will still further diminish their value, till at last the value of each will diminish so much, that it will scarcely exceed the cost of production, and then they will cease to be built. If the demand varies as as well as the supply, it is quite easy to discover what its effects must be according as its rate of increase is greater, equal to, or less than the supply.

28. These considerations are sufficient to shew the fallacy of the doctrine, that it is the cost of production which regulates price or value. On the contrary, it is generally the value an article is expected to have, when produced, that causes it to be produced. The difference between the cost of its production and its value is called the *profit*, and the course of a prudent man would be, first to calculate the cost of production of the article, then to consider what would be its probable value when produced,

and if the difference between the two, or the profit, is sufficient to make it worth his while to produce it, he will do so, if not, he should try to discover some more profitable operation. If the value of the article when produced is only equal to, or less than the cost of production, he must sell at a loss, and repeated operations of this nature will end by ruining him. The history of all commerce is but too full of examples of the value of articles falling below their cost of production, and of mercantile enterprises which never pay their expences. There is but one way by which a producer can govern price by the cost of production, and that is when he can obtain a command over the supply, and limit it artificially, and not produce more than the public can be made to buy at a particular price. The Dutch acted upon this principle when they conquered the Spice Islands in the Eastern Archipelago. With contemptible selfishness, they cut down three-fourths of the spice-bearing trees, and so artificially enhanced the value of the remainder. It is also said that there is but one mine in England which produces plumbago, or black lead for pencils, and this being in the hands of one proprietor, he carefully limits its annual produce to force up its price in the market.

29. Many railway companies, in regulating their fares, have acted upon an error analogous to the doctrine that the cost of production regulates price. It used to be not an uncommon argument for keeping up fares very high, that the cost of making the railway was very high, and *therefore* the fares must be high. The two things have no relation whatever. The object should be so to regulate the fares as to produce the greatest amount of revenue possible. The companies should have calculated before making the railway, the amount of revenue they could probably obtain, which would determine the value

of the railway when made, and then the cost of making the railway, and if the revenue would pay the interest of the money expended in making the railway then they should make it, otherwise not.

30. When political economy began to be studied philosophically, it was alleged that the quantity of labor bestowed upon each article was the regulator of its value. Afterwards it was found necessary to modify this doctrine, and it was said that the relation of demand and supply affected its value temporarily, but that the cost of production was its permanent regulator. The foregoing observations, however, seem to show that this latter idea must be discarded, and that correctly speaking, the RELATION BETWEEN DEMAND AND SUPPLY IS THE SOLE REGULATOR OF VALUE, and that all circumstances whatever which influence value, can be shown to do so solely through their effect in altering that relation, and it also appears that the relation between the cost of production and value is the determining cause of its existence, or its being continued to be produced.

31. The fundamental fallacy of the doctrine that the cost of production regulates value is that it wholly omits to take into consideration the effect that an excess of quantity has in depressing the market. If producers of articles had always a full knowledge of the supply that would be required, and refrained from throwing more on the market than could be taken off at a remunerative price, that doctrine might appear more specious. But all commerce is full of overtrading, and if commodities are thrown upon the market there is no limit to the depression of price they may undergo, whatever may be their cost of production. When this is the case, the article ceases to be produced until the excessive supply is worked off, and the price has risen on account of the increased

proportion of demand over supply. As soon as the enhanced price caused by the limitation of the supply, and by that only, makes it profitable to produce, production will be resumed; if the price continues to rise, production will be still further stimulated, and capital will be attracted into that branch of business, until the increased proportion of supply compared to the demand again causes the price to fall. But in all these cases it is the rise or fall of the price that attracts or repels capital, and not the employment of capital that regulates the price. The idea that cost of production regulates value proceeds upon the supposition that the individual can control the market, whereas in all ordinary cases it is the market that controls the individual. In those exceptional cases where a single individual has such power over the production of any article as to be able sensibly to influence the market, he can of course raise the profits of that article far above the usual commercial profits, simply from his power of keeping competitors out of his line of business.

32. The importance of this doctrine demands the utmost attention, for an erroneous conception on this point is not only one of the cardinal errors of Adam Smith, but is the very foundation of the Protectionist System of Political Economy which so long afflicted this country. Adam Smith, (Book I. Chap. VII.) says:— "When the price of any commodity is neither more nor less than what is sufficient to pay the rent of the land, the wages of labor, and the profits of the stock employed in raising, preparing, and bringing it to the market, according to their *natural* rates, the commodity is then sold for what may be called its *natural* price." The apparent good sense, clearness, and precision of this sentence, might perhaps entrap an unwary thinker into giving it a ready assent. No sooner, however, do we come to analyse it,

than we discover that it would be difficult for so few lines of such a plausible sound, to contain a greater amount of vagueness and inaccuracy, and when we attempt to extract some tangible meaning from it, it vanishes away into nothing. What is the *natural* rent of land? What are the *natural* wages of labor? What is the *natural* cost of raising, preparing, or bringing it to market? One producer may be more skilful and industrious than another, or may discover more economical methods of producing than his neighbours, and these differences may exist in a great variety of degrees. Which of these are *natural* rates? Does the *natural* value differ in every case? Take the case of wheat as an example. Wheat is grown in one county where wages are 14s. per week, in another where they are 10s., in another where they are 7s., in other parts of the world where it is raised by the labor of serfs. Rent may be 30s. an acre in one county, 20s. in another, and 15s. in another. The cost of transport from one county may be 2s. a quarter, from another 5s. Quantities of wheat produced under all these varying circumstances mingle in the same market, and it never happens that each separate parcel of wheat is sold according to what Adam Smith would call its *natural* price. On the contrary, is it not notorious that wheat of the same quality will sell at the same price, in the same market, at the same time, whether it comes from Essex or Peru? whether it be produced at an expense of 25s. a quarter, or 2s.? No consideration whatever influences the price in the market, but that of demand and supply. If a small quantity of the wheat produced at a very low price be brought into the market, its value will immediately conform to the ruling market price; if a large quantity be thrown on the market, its effect will be to depress the value of the whole quantity in the market—

and in all these cases, simply according to the rate of alteration it produces in the relation between supply and demand. On the news of a declaration of war being received in a peaceful market, the price flies up immediately, because it is apprehended that war will cut off the sources of supply, and cause a scarcity; on the other hand, if in the midst of war the news comes that the arch enemy is no more, the price immediately falls, because it is expected that peace will again open the flood gates of abundance. Now these, and whatever other causes act upon the price of wheat, do so simply through the prospective changes in the relation of supply and demand that they are expected to produce; and without the smallest reference to the cost of its production.

33. We have taken the example of corn to illustrate our meaning, because from the magnitude of the interests involved in it, and the constant necessity that exists for transactions taking place, there can be no better subject to exhibit the extreme sensitiveness of the value to the influences of the instant, without reference to anything else. It would be easy to shew that the very same considerations apply to every commodity, though not in so perfect a degree. Since, then, value is so entirely the creature of circumstances, it is clear that he will be the most successful in commerce, who is the most skilful in discerning or creating a want in the community, and hastens to supply it before rivals can compete with him.

34. The sentence we have quoted above, implies that the cost of production of corn must regulate price, whereas on the contrary, it is the price of corn which must in a great part regulate its cost of production. In another place Adam Smith says,* "high or low wages and profit are the *causes* of high or low price," whereas

* Book I., chap. xi.

it is manifestly precisely the reverse. Rent, also, is undoubtedly an element of the cost of production; now, Adam Smith and the Protectionists say, that it is the amount of rent which should regulate the price of corn, whereas, the contrary is the fact, *it is the price of corn which must regulate rent.* The Protectionists put down the *natural* rent at so much, (which meant as much as would give them a comfortable income,) wages of labor so much, other expences so much, and taking the sum total, they call that the *natural* and proper price of corn, which they should get, and accordingly they proceeded to pass laws, which they intended to have the effect of always keeping the price of corn at a certain price—with what success any one who has paid any attention to the prices of corn from 1815 to 1846 can see. They attempted in their folly to bind nature in chains. We deride the futile rage of Xerxes, who bound the sea in chains, because it dared to destroy the ships of the great King; but the attempt of the Protectionists was not a whit less foolish and ineffectual. It is well known that all these laws failed in their attempt to secure a fixed price for corn.

35. It is quite evident that it is the price of corn which must regulate rent, just in the same way as the price of manufactured goods determines the wages of labor. The farmer must consider what will be the value of the produce of the farm, and then he must consider how much he can afford as cost of production, or how much he can afford to pay as *rent.* Unless he can keep that element of the cost of production within due bounds, he must cease to produce just as the manufacturer must cease to produce, if he cannot restrain the wages of labor within certain limits.

36. We shall find that the rent of land is an excellent example of the rule we have established for determin-

ing instantaneous value. The rent is the money paid by the farmer to the landlord for the use of the land. The first indispensable condition of rent arising is, that one person is the owner of more land than he can conveniently cultivate himself. A landlord is a capitalist whose capital consists of land, and like all other capitalists, he either trades with it himself, or lets part of it out to others to trade with, and of course he is entitled to receive interest for the use of his capital, like any other capitalist. The difference between a landlord who cultivates his own land and a farmer, is just the difference between the man who trades with his own or on borrowed capital. A man who has a large amount of capital in land is in a very different position to one who has his capital in money, because no single man can trade with any very large amount of land. It is very rarely a man farms more than a thousand acres of land, but many a merchant trades with half a million of money. Now unless a man can trade with his land himself, or get some one else to do so, it is of no value to him; but if the merchant cannot trade profitably with half a million of money, it will still be useful to him —he can always get some interest for its use, however small. It is therefore a positive necessity to a man who possesses a large estate, to let part of it out to farmers. No misfortune to a large landed proprietor could be worse than to have a considerable extent of his estate thrown upon his hands at once. Now this circumstance increases the power of the person who wants to borrow the capital over the one who wants to lend it; it is a greater service done to a landlord to take a farm, than it is to a tenant to let it to him. In this case, like as in other loan of capital, we must consider the farmer as the purchaser of the service; but when the capital to be borrowed is land, the power of the purchaser over the seller is much greater

than when it is money. Hence we must expect that the price of it should necessarily be lower; and this is what we actually find to be the case. The rent of land, or the money paid for the use of that species of capital, is much less than in the safest mercantile operation. There are, no doubt, other causes which also tend to produce a similar effect, operating simultaneously to increase the difference; but the cause we first assigned is a true cause of a certain amount of that effect, though not of the whole of it. The rent of land rarely exceeds $2\frac{1}{2}$ or three per cent. of the value of the land, and is often less than that.

37. Having thus shown that the average amount of the interest of the species of capital which consist of land must in general be less than the average amount of the interest of capital in the form of money, we must now consider how rent arises at all, and show that the actual amount of it in any particular case conforms to our rule. If we suppose the produce of the farm carried to market, and realized in money, it is evident that the first charges upon it are the public burdens, which the state requires by way of taxes, the farmer's own living, the cost of all the laborers and animals upon his farm, and the cost of conveying it to market. When all these necessary and preliminary charges are deducted from the price realized, the remainder is the fund which provides for the landlord's rent and the farmer's profits. The proportions in which this fund is finally divided is settled by our rule. But the tenant has a stronger natural position than the landlord. The landlord has a very strong necessity to let the farm, the farmer has no very strong necessity to take it, and if he is unable to gain a fair profit by doing so, he has more resources open to him to employ his capital in than the landlord has. Hence, when the farmer's profits and the landlord's rent come into collision, the landlord's rent

must give way. The inherent strength of the tenant's position must therefore in the long run prevail over the landlord, and hence we see why it is that the price of corn determines the rent.

38. The sum which the farmer has to pay as rent is included in the total cost of production, and it will be determined exactly in the same way as the price of any other service, by assigning a proper value to each quantity in our formula. We have already shown that it will in general be lower than the money paid for the use of any other kind of capital, because the power of the purchaser over the seller is greater than usual; but if there be many competitors to purchase the service, the power of the seller over each of them will increase, and this will raise the price of the service. That is to say, if there be many competitors for the farm, the rent given for it will be greater than if there are few.

39. From these observations we gather that the farmer is just in the same position as the manufacturer; neither of them can command the price they please for the articles they have to sell; consequently they must each consider what will be the probable value of it when sold, and then they must devote the whole of their skill and energy in diminishing the cost of production. In order to do this each of them calls in the aid of science; the manufacturer in the mechanical form of machinery, the farmer in the chemical form of manures and draining, and every other means that science or skill can suggest to develop the productive powers of the earth. Neither of them can fix absolutely what the cost of production is, until every improvement in science has been adopted, and every resource exhausted. It is undoubtedly true that the cost of production and the value of the produce must have a relation to each other, but the question which is

to govern the other is the whole difference between protection and free trade. Under the former system, the cost of production might be as extravagant and wasteful as possible; the land might be undrained and badly cultivated, and the object was to secure by law a price which should, under all circumstances, cover every conceivable piece of waste and bad management, which was, with somewhat of a *mauvaise plaisanterie*, called the *natural* price of corn. While the one system held out a direct reward for every species of mismanagement and ignorance and stinted production, the other, on the contrary, encourages skill and energy, and stimulates production, and so confers upon the community at large the blessings of as great abundance and cheapness as circumstances permit.

40. Our formula at once explains a fact which is well known to every one who has practical acquaintance with the management of estates, that it is far more advantageous for a landlord to have his estate divided into farms of moderate size than very large ones, because so many more persons have a moderate than a large quantity of capital, and consequently so many more are able to compete for a moderate-sized farm than a large one. The landlord being the seller of the service, his power over each competitor increases according to their number, and he can demand a higher price for it. But if a farm is very large, so few can compete for it, that the landlord's power over each diminishes, and he will usually be obliged to let it low. The same remark holds good in houses, and for the same reason; houses of a moderate size let much better than those of a large one.

41. The description of sales we have hitherto been considering are all voluntary, and we have seen how the rule we obtained acted in each of them. But there is

another very large class of sales, which frequently occur, and our rule would be wholly wanting in that generality which we claim for it, unless it also accounted for them. The class we allude to includes forced sales of all descriptions, where, under the pressure of particular circumstances, persons are obliged to part with their property. Such, for instance, are all sales of bankrupt stock. It is well known that a forced sale is almost universally a loss to the seller, and that he very rarely gets what, under other circumstances, would be the ordinary value of the article he parts with; and this is simply because on account of his necessity to sell, his power over the purchaser is diminished, he must tempt the purchaser to buy by giving him an advantage in doing so. If the purchaser does not much require the article, the service is one of small intensity, and the seller must part with his property at a sacrifice. Thus, the power of the purchaser increases over him very rapidly, and the price diminishes in proportion. On the other hand, many persons sometimes attend the sale, and bid against each other, and so raise the price, because, as the number of competitors to purchase increases, the power of the seller over each of them begins to revive, and it may happen, that if the competition is very keen, the article may be sold at its full value.

42. The formula we obtained explains a very well known phenomenon in the change of prices, that a small variation in the price of corn causes a greater variation in the price of bread than a similar variation in the quantity of any other produce causes in its price. Bread is an article of prime necessity to mankind, whatever else fails they must have that, and they cannot do without it for any length of time; consequently, as the supply diminishes, and people begin to feel the want of food, not only

is it a service of greater intensity to supply them, but the power of the seller greatly increases over the purchaser, as the former can hold out much longer than the latter. The necessity of the purchaser is much greater than the necessity of the seller, and of course the sellers will have acuteness enough to take advantage of their power, and so the price of bread is rapidly raised. On the other hand, if there be a superabundance of corn, the power of the purchaser to eat is not increased in proportion; he must have a certain quantity to eat, however scarce food is, and he cannot eat more than a certain quantity however abundant it be, consequently, as the quantity of corn increases, and only a certain quantity can be consumed, it is every producer's wish to have his own disposed of, and his eagerness to sell increases the power of the purchaser over him in a very rapid degree, which causes a great fall in the price.

43. Corn is an excellent example to shew the fallacy of the maxim that price depends upon the cost of production. When the farmer has produced corn he does not regulate the price of it by the sum it costs him to produce it, but he endeavours to obtain as high a price as he can squeeze out of the necessities of the public. The farmer sells his corn to the miller, who bestows his industry upon it, and sells it as flour to the baker. The baker bestows his industry upon the flour, and sells it as bread to the public. Now it is evident that the cost of the article at each stage of these operations is the sum of the cost of all the preceding ones, together with the price which the holder of the corn may set upon his own industry, and the ultimate price to the consumer, to enable all these operations to be conducted permanently, must be *at least* the sum of the cost of all the previous operations. But no one will say that is its instantaneous value. On

the contrary, it is notorious that each holder at every stage does all he can to aggravate the difference between the cost of production and the instantaneous value. The cost of production is merely an inferior limit below which the instantaneous value must not fall if the business is to be self-supporting. The farmer seeks every opportunity to raise the price of corn to the miller—the miller strives to buy as cheap as he can from the farmer, and sell as dear as he can to the baker, and the baker tries to buy his flour as cheap as he can from the miller, and to sell his bread as dear as he can to the public. And the power of the holder at each stage of the operation is limited and controlled by the necessity he has to sell, either on account of the depreciation of the article itself by time or by his other necessities; but limited and controlled by these circumstances, the operations of each are wholly independent of each other.

44. A diminished quantity in the supply of wool does not cause, by any means so great a variation in the price of cloth as in the case of corn, because it is no such great necessity for a man to have new clothes as food. If times are hard and he must economise, he may deny himself new clothes for a long time, and consequently the seller of clothes has by no means such a powerful hold over him as the seller of food; on the other hand an increased supply in the quantity of wool does not cause such a diminution in the price of cloth as an increased supply of corn in the price of bread, because when people are well to do and thriving, they are apt to indulge themselves in new clothes before most other things, and they can increase their consumption of clothes to a much greater degree than they can their consumption of food, and this keeps up the demand for them, and prevents their price falling.

45. Both these cases of corn and wool shew how the instantaneous value depends upon the ratio of supply and demand, but they do so in very different degrees. Corn is probably the most sensitive of any article. A few fine or wet days, or a passing rumor in Mark-lane, may produce a very material alteration in prices. Though the prices, therefore, of all commodities are governed by the same principle, they are affected in very different proportions, and the degree of variation produced in each one by an alteration in the ratio of supply and demand depends upon its own peculiar circumstances, which it would be manifestly impossible to discuss here.

46. Rent and interest are precisely analogous in their nature, the one being the sum paid for the temporary use of capital in the form of land, the other in that of money. From a few simple examples we have endeavoured to deduce a general rule, which indicated the cause of the change of price in those instances, and to show its correctness by applying it to a number of other cases. They might have been multiplied to a great extent, but it would not have been consistent with our limits to have done so. They are, however, probably sufficient to establish the truth of our rule, and if they are not, no number could. The interest of money is also governed by the very same rule, but that is of too great importance to be treated in so cursory a manner, and will form the subject of a separate chapter.

47. We have in the preceding chapter carefully distinguished between the expressions *depreciation* and *diminution in value;* the former being internal, and the latter external. Under the operation of the principle of demand and supply, an article which may be greatly deteriorated in quality, and therefore *depreciated*, may from the great demand for it, and its scarcity, be greatly increased in

value. A familiar, but extreme, instance of this, is what sometimes occurs in besieged towns, when the vilest food often sells for fabulous prices. A second-hand book may be considered as depreciated. It matters not that it be perfectly clean and good in every respect, if it has been the property of a purchaser for a day, the charm of novelty is gone, and it loses greatly in value; but if it be a work of celebrity and scarce, a second-hand copy will sometimes sell for more than the original published price. An instance of this was the first edition of Professor Peacock's Treatise on Algebra. It was soon out of print, but so great was its fame, that well worn second-hand copies cost more than its price when new. We shall find that the difference between depreciation and diminution in value of the currency is of great importance in a future part of the work, and we cannot give a better illustration of it than an answer by one of the witnesses before the Bullion Committee:* "Are not the Bankers in the habit of giving a premium for silver? * * * * I have given £101 for a quantity of coin worth £60 if it was melted down, though passing for £100, but I have given that premium, bad as it is, particularly at harvest time; it is always very scarce then."

48. In what we have hitherto said, we have confined ourselves to stating that the currency is not only evidence of services due, but also a measure of them, that is to say, if a certain portion or weight of the metal represents a certain portion of service, a fractional part of such portion of metal represents a proportionate part of the service due, and we have carefully avoided touching upon the question as to what actual amount of service any particular weight of the currency represents. That is a question of a far more intricate nature, and would be beyond the limits of

* W. Merle, Esq., Bullion Report Appendix, page 54.

this work to discuss, as we are only endeavouring to explain the laws which govern *a change* in prices, and not their actual amount. A Bank does not originate or govern a currency, its only purpose is to regulate and moderate it when introduced, and to facilitate certain changes in its distribution, which are generally considered beneficial to the community. A Bank originally only dealt with an existing currency, and did not create one. We have considered the wealth of a country to be the sum of the united industry, or useful operations of its inhabitants, and what relation the currency may bear to them, is a problem of far too abstruse a nature to be here mooted. Nay, it is possible to conceive a country to be of any degree of wealth, and yet require no currency. It is not at all beyond the limits of fair argument to imagine that it might happen that in some community every person might render to his neighbours the exact amount of service he required from them, and if such a state of things could be, there would manifestly be no use for any currency (in the ordinary sense of the word), because there would be no balance of services due to be recorded in evidence. Such a state of things as this, if admissible in imagination, is clearly compatible with any degree of wealth; if the inhabitants were generally idle, and only required and rendered the simplest and rudest kind of services, such a country would be very poor; if they rendered and required more services from each other, and became more civilized, it would increase in wealth, and so on to any degree, yet though wealth would increase more and more, there would be no more need of currency at one stage than another. And in a country where there is a currency, a very small quantity of it may be made to perform the duties of a very much larger amount by judicious management, and if a great quantity of it already exists, the institution of a Bank, by econo-

mizing its use in the operations of commerce, sets free a very large amount, which may in its turn be the means of stimulating and developing further enterprise to a very great extent. By the Banking system of London, operations to the amount of many millions are daily settled, without the intervention of a single sovereign or Bank note.

49. In the observations we have hitherto made, we have tacitly assumed that the currency was an invariable standard of value, and that the changes in price were caused solely by the action of a change in the relative demand and supply of the commodities themselves, nor in the examples we have given would there be any error in doing so, because they were all supposed to be transacted in a very short time. But if we compare prices at long intervals or periods of time, there are other causes of a more complicated nature, which come into play, and must be taken into consideration, which arise out of a variation in the value of the currency itself. It would be premature here to enter into any discussion of the variation in prices alleged to be produced by the issues of Banks, as that would anticipate the consideration of the credit system, which we have not yet come to. We shall not then, at present, speak of any changes in the value of the currency except those that would occur under a purely metallic system.

50. The first requisite of any substance used as a currency is steadiness in value, and just as that steadiness approximates to invariability, the more desirable it becomes. The currency being not only the evidence of services due to the possessor of it, but also the measure of their amount, it would manifestly be of great advantage that the same amount of gold should always be able to purchase the same amount of service, that is, that the value

of the currency should be uniform. To have a currency constantly changing its value would be as inconvenient as to have the length of the yard measure changing from day to day, or to measure time by a clock which was constantly changing its rate of going. These two cases are entirely within our own control; we can absolutely fix the length of the yard, and our mechanism is so perfect that we can almost attain perfect accuracy in our measure of time, and even if that should fail, we can always detect the minutest imperfection by the unerring clockwork of heaven. But, unfortunately, the case is far different in the measure of value, which is constantly liable to undergo a change.

51. As the exchangeable value of the currency and the debts it represents, or the services it can command, follows exactly the same rules as the relative values of any other commodities, a change in the value of the currency may be attended with very serious consequences. In the operations of buying and selling it may be of comparatively small importance, because these take so short a time to be completed that no perceptible change can occur; but it often happens that debts are contracted which are not intended to be discharged for long intervals of time, such as mortgages on landed property, and the changes in the value of the currency between the times when the contract was made, and the time when it has to be fulfilled, may have very ruinous consequences to individuals. Thus the owners of estates frequently borrow large sums upon agreeing to pay interest for their use. Now, if any serious diminution in the quantity of the currency takes place, it is evident that the commodities raised from the land which enable the landlord to purchase the gold which he has promised to pay, may not be able to purchase so much of it as they might have done when the contract was made, and then he may be ruined, although the commodities

themselves are as useful, and therefore as valuable as ever they were. In other words, his rents will fall while his debts remain the same. But if a great increase takes place in the quantity of the currency, his commodities will purchase a greater amount of it than they could before, and as he only promised to pay a certain quantity of gold he has more to spare after he has fulfilled his contract. That is, his debts remain the same, and his rents will rise. The greater part of the community are included in the classes of debtor and creditor, and their interests are always opposed to each other; it is always the interest of the former that the quantity of the currency should increase, and of the latter that it should diminish, while true justice can only be done between them when the measure remains invariable.

52. Gold and silver being used in all civilized communities as the *measures* of value, it is not unusual for persons who are not sufficiently precise in their language to call them the *standard* of value. But this latter expression is certainly incorrect, as a standard means an invariable measure which is capable of being defined and fixed, as the measure of length, weight, and time. These are capable of being fixed once for all, because they are certain portions of the quantities themselves; but value depends upon the ratio of quantities, which by the very nature of things it is impossible to control, and the actual alteration in the quantities of the precious metals has materially altered their value at different periods of history.

53. Many political economists perceiving that the precious metals could not be accepted as the standard of value, have endeavoured to discover some production which might serve as a better one, and some of great eminence have selected wheat, but this will not stand the test of examination.

54. If wheat were allowed to bear its natural price, by which we mean its price when left to the free competition between buyer and seller, in the market of the world, it might perhaps lead to results of great interest and value, but with scarcely any exception the trade in corn has never been free and unfettered, either in England or in any country in Europe. Either there have been laws to encourage exportation or to prevent it, or to encourage importation or to prevent it, which has always exercised certain influences which it is absolutely impossible to ascertain, and yet which it would be necessary to disengage before we could set up wheat as a standard. An inspection of a table of prices of wheat for many hundred years will shew how unfit it is for such a purpose. In no article whatever are there such violent fluctuations in price either in long periods or in short ones. Wheat moreover is clearly a manufactured article; by skill and the application of science, wheat may be grown much cheaper in one place than another, and at one period than another.

55. It would be far too long to trace here the various alterations in policy which have taken place in England in the laws regarding corn. Since the year 1225, when the first law relating to corn was made, to 1846, when they were for ever abolished, about 150 Acts of Parliament were made for the express purpose of tampering with the price of corn. Many, if not most of these, did exercise some influence on its price, and it is chimerical to suppose that any one could pretend to state precisely what influence each one had in raising or lowering its price, and yet this must be done before we could arrive at a result of any value. And the same observations will apply to any other commodity whatever, the value of which changes in proportion to its greater or less abundance in comparison to the de-

mand, or the various methods which may be discovered for diminishing the cost of its production.

56. Other writers of eminence suggest the wages of labor, as a surer standard, but this will be found upon investigation to be a more fallacious idea than the former. The wages of labor depend, like any commodity, on the demand and supply. The greatest possible difference exists between the rates of wages in different parts of the same country, and still more in neighbouring countries, and which of these is to be considered as the standard of the age? The wages of labor have risen greatly in most trades since the beginning of this century, and yet it is generally supposed that the currency was then more abundant comparatively speaking, than at present, and the reason is clearly that industrial operations have so greatly multiplied since then.

57. These considerations shew that any attempt to fix upon a standard of value is quite hopeless, and that there are so many corrections necessary to be applied, which arise from artificial restraints, taxes, and a multitude of other causes, which utterly elude the grasp of the acutest intellect, or any possibility of testing their accuracy, that we may say with little hesitation, that such a thing as a standard of value has either no existence at all, or which is much the same thing practically, it is impossible to ascertain the necessary corrections which must be made before it can be settled.

58. Since value depends entirely upon the ratio of demand and supply at any particular time, it is quite clear that it is wholly beyond the power of any law to fix the value of any one commodity as compared with any other, whether it be gold in reference to corn, or cloth, or wages, or anything else. These things were not properly understood in former times, and our early history is full of

legislative attempts to fix the price of bread, beer, wages, and other commodities, but they all failed in their effect. As commercial ideas gradually advanced, these attempts were abandoned one after the other, and the last which lingered was the attempt to fix the value of gold in reference to silver. In a subsequent chapter we shall trace the history of these regulations, which were only finally abandoned in 1816. After considerable variations, the relative values of these metals were fixed in 1717, on the report of Sir Isaac Newton, the Master of the Mint, at the denominations now in force, and the terms then really meant the price of one metal in reference to the other. Accidental circumstances combined during the greater part of the last century to keep this relation pretty steady so as to conceal the faulty principle till near the close of it, when their values underwent a great change. Soon after that the suspension of cash payments took place, and when they were restored in 1819, the true principle of having but one standard metal was in force. Since the year 1816, when this took place, gold has been the only standard currency of Great Britain, and silver is merely made into tokens for small change. It is true that the old expression of saying that the Mint price of gold is £3 17s. 10½d. per oz. is still retained, but we shall see that it has wholly changed its meaning, and has no reference to silver at all. We shall see hereafter that it is of great use in testing the depreciation of the currency, but in its present meaning it is no violation of the principle we have noticed above. The ambiguous meaning of the word "price" in the expression has sometimes been overlooked, and warm animadversions been made on the supposed attempt at fixing the price of gold, as if the phrase meant the same thing now as it did when silver was legal tender.

60. We have before observed that the value of metals is always measured by their *weight*, and not by their quantity or bulk. The comparative value of gold and silver at present is about 15 to 1. The specific gravity of pure gold is 19·258, that of silver 10·474, which means that if a quantity of gold weighs 19·258 ounces or pounds, an equal quantity of silver would weigh 10·474 ounces or pounds. The actual quantity of silver in use is supposed on the lowest estimate, to be forty times that of gold. By combining the preceding figures it will be found that the weight of the silver in use is at least 21·755 times that of gold. But while its weight is more than $21\frac{1}{2}$ to 1, its value is less than 1 to 15 to that of gold. How is this difference to be accounted for?—by the rule we have been discussing at so great a length,—the proportion of the demand to the supply of the two metals. Silver is far more extensively useful than gold. There are few persons in easy circumstances who do not possess more or less of solid silver plate, but such a thing as solid gold plate scarcely exists. What is called gold plate is only silver-gilt. Solid gold is only used for such purposes as watch-cases, or trinkets, such as chains or pencil-cases or brooches, &c. Silver, therefore, is in far greater demand for commercial purposes than gold, and it is this that raises its value to a higher proportion in comparison to gold than we might expect from their comparative quantities by weight. It might no doubt be said that it is its very cheapness in comparison to gold that makes it more sought after, and the excessive dearness of gold that prevents it being used as extensively as silver, which is to a certain extent true, but then the principle which we have noticed with respect to large and small farms comes into action; the very cheapness of silver causes a much greater number of persons to be able to

afford to have it than gold, and consequently the proportion to the demand for silver, compared to the supply, is greater than the proportion of the demand of gold to the supply; and it has the effect of raising the comparative value of silver as compared to gold, just in the same way as the comparative value of small farms is usually greater than that of large ones.

61. The comparative values of gold and silver have been very differently estimated, in different ages, which will be noticed in the next chapter. They have not varied in any very material degree during the last few centuries, for the reason that the proportion between the demand and supply of the two metals has not varied materially. If the proportion of either alter very materially, as there seems considerable prospect of being the case, from the amazing abundance of the gold fields of California and Australia, their values must alter, just in the same way as a very material alteration in the supply of any other commodity will cause an alteration in its value.

62. The attempt to have a legal currency of both metals of unlimited amount, with a fixed relative value, is always liable to derangement from the excess of one or the other, so long as any one has the privilege of having an unlimited quantity of bullion coined into money. This inconvenience was repeatedly felt in England, when both metals were coined in unlimited quantities; but since 1816 this inconvenience has been obviated by the artificial limitation of the quantity of one metal in strict accordance with the formula we have given.

63. If we suppose any other substance to be used as a currency, the very same principles apply. However good or safe it may be in itself, an excessive quantity necessarily and infallibly causes a diminution in its value. The paper currency of the country bears on

the face of it a promise to pay a given sum of money on demand. As long as a Bank does not issue more of such promises to pay than it is believed to be able to fulfil, or than the trade of the district requires, they will circulate at their full value. But if it issues more than people think prudent, there will be a general disinclination to receive them at their nominal value, and the inevitable consequence will be that the holders of them will immediately go to the Bank and demand payment for them; or if it issues more than the trade of the district requires, they will be returned on it for payment. In either of these cases, therefore, so long as the Bank is solvent, and can pay its notes, a temporary over-issue has an immediate tendency to correct itself; the withdrawal of the excess of quantity of the notes will restore them to their par value, to the loss of the Bank very probably, but still, if the Bank can bear the loss, the public will not suffer.

64. Suppose, however, while the Bank is notoriously wealthy and solvent, and has a considerable amount of its notes in circulation, they are suddenly declared to be *inconvertible*,—that is, the Bank is released from its obligation to pay its notes in money,—if the public agree to receive them in payment as before, while the same caution is exercised in issuing them as would be required if they were payable in money, they will still pass for their par value. But in this state they are to be considered as a distinct and independent substance—a currency of a new material—just as gold and silver are, and they will follow the very same rules; that is, their value will depend upon the quantity of them which is issued. If while gold and silver are equally legal tender, and inconvertible with respect to each other, a very great increase in the quantity of silver takes place while gold remains the same, the silver inevitably diminishes in value, and a sovereign would pass for twenty-two or any greater number of

shillings according to circumstances, supposing a perfect freedom in prices to be allowed by law. A tradesman would make a difference in the prices of his goods according as he was paid in gold or silver. Thus a shilling, instead of representing the one-twentieth part of a sovereign, would only represent the one-twenty-second part; and it is quite obvious that the difference between $\frac{1}{20}$ and $\frac{1}{22}$ would be the exact measure of the alteration in value the silver currency had undergone compared with the gold. Now an inconvertible paper currency is to be treated in all respects as an independent species of currency, like silver, and will follow exactly the same rules. No matter how good it is, or how wealthy the corporation be that issues it, an excess in quantity will infallibly cause a diminution in value. If the natural remedy of an excess of paper be withdrawn, namely, a power to demand payment for it, the excessive quantity will remain in circulation, and the very same result will follow as in the case of silver: it will diminish in value as compared with sovereigns. There will be two prices for articles—one when paid in gold and another when paid in paper – and the difference between the two will evidently be the measure of the diminution in value of the paper.

65. We have seen that the value of any article when sold by a private transaction between two individuals, is measured and determined by the relative circumstances of each. The price or general value between the seller and a larger circle of purchasers is determined at a local market, and the larger and more open this is, the more nearly do we approach to the real value of the article. If there are many markets for an article its price will of course vary according to the local circumstances of each, but it is quite clear that the more the means of transport are increased, accelerated, and cheapened, the more nearly will its value in the different markets be

equalized, and if there be no artificial obstruction by law or otherwise to impede its being freely transported from one to the other, the difference in its value in different markets cannot much exceed for any length of time the cost of its carriage from one to the other. Hence the inevitable tendency of improving and accelerating the means of transport is to equalize prices throughout the whole extent of country in which it takes place. Before the introduction of roads into a country, one province may be starving from a dearth of provisions, while in another, not far off, they may be so abundant as to be going to waste, while the expence of transporting them from one to the other may be so great as to make it impossible to do so. It is said that on one occasion in Spain, the inhabitants of one province were dying of famine, while in another there was a superabundance, and it was found cheaper to import corn from America to the starving province than from another part of the same country. Exactly in the same way the introduction of turnpike-roads, and afterwards of railroads in England, has had the effect of raising the price of all sorts of agricultural produce in the distant counties, and depressing it in those near the metropolis, and the introduction of steam navigation has raised the rental of the remote parts of Scotland many thousands of pounds annually.

66. Since it is quite evident that the difference in the price of an article at any two markets can never, for any length of time, exceed the cost of conveying it from the cheaper to the dearer, it is also clear that the greater its intrinsic value is, *i. e.* the greater its value in comparison to its bulk, the less can its difference in price be in any two markets, and the more uniform will its value be in all the markets of the world. Thus diamonds, to which men have universally agreed to assign the highest value of any production, are nearly of uniform value throughout the world,

owing to the facility of their transport, which bears so inappreciable a relation to their value. In times of great public danger, it is quite common for people to invest their whole property in precious stones. Precious stones, however, for many reasons which are too obvious to mention, are unsuitable to form a currency. Next after the precious stones men have agreed to attribute the greatest value to gold, beyond any other existing substance, and from the same circumstance, gold bullion preserves a greater uniformity of value throughout the world than any other substance, and the increased means, rapidity, and safety of transport, which now connect the nations of the earth, will continually tend more and more to confine the possible variations of its price within constantly decreasing limits.

67. We have already seen that the idea of a standard of value is wholly illusory, and is as impossible in the nature of things as the philosopher's stone, or the perpetual motion. Though gold bullion never can fulfil the impossible duty of being a standard of value of other articles, it is an infallible standard of measuring the value of what professes to represent it, namely the currency of this country. Gold bullion which is received in all markets, must necessarily be of more uniform value than gold coin which passes in only one country. Coin can be quickly reduced into bullion, but to have bullion changed into coin is a comparatively slow and expensive process for any private individual. Hence it is impossible that bullion can ever be really more valuable than coin, which professes to contain a certain amount of it, and if the price of bullion rises in the market above the value of the coin, which professes to contain a fixed amount of it, it is an infallible proof that the coin has sustained some diminution in weight or purity from the standard, or is depreciated.

68. We shall have occasion to discuss this latter point

at much greater length, when we come to consider the nature and effects of a paper currency. In former times, when the means of transport were so much more unfrequent, slower, uncertain, expensive, and hazardous than at present, it was possible for gold bullion to undergo much greater variation in value, both in duration and extent, in different countries, and the severe penal laws regarding the melting or exportation of the coin of the realm, frequently caused an artificial difference between coin and bullion, hence the test we have spoken of was not so easily recognizable or so certain as now, but a long course of the observation of effects in a particular direction, after making due allowance for other disturbing causes, may lead to results upon which reliance may be placed.

69. It has frequently happened in this country, as well as in every other in Europe, that the changes in the value of commodities indicated by their nominal prices in money have been only apparent and not real. The Sovereigns in former days attempted to multiply their resources by diminishing the quantity of bullion in the coin, while they retained its nominal value. The people, however, even in those times, were sharpsighted enough to detect the fraud, and to counteract this depreciation of the currency they immediately raised the nominal prices of their goods, so as to insure receiving the same weight of silver. Thus the "pound," in days of William the Conqueror, actually was a pound weight of silver, and a shilling was the 20th part of a pound weight of silver. Repeated reductions were made in the weight of the pound, and at the present day it is coined into 66 shillings, so that, leaving out of consideration the diminution in the value of silver, from its greater abundance, the nominal prices of the present time must be reduced in the proportion of 20 to 66, or 1 to $3\frac{3}{10}$, before a just comparison can be made of the purchasing

power of silver at these two periods. This is properly called a depreciation of the currency. But in addition to this, silver is unquestionably far more abundant now than in those days, and it has consequently diminished in value. So that we may say, that the currency is both greatly depreciated as well as diminished in value within the last eight centuries. Hence, in considering changes in price, we must always be careful to ascertain whether the change is real, which may be either through some alteration in the condition of production or demand of the article itself, or of the greater or less abundance of the precious metals; or whether it be only apparent and caused by a depreciation of the currency.

70. A certain relation having been established between the currency and the services, or industrial operations it represented, their value would not alter so long as this proportion remained the same. But if either one or the other altered considerably in quantity, a change would take place in their value. In early times, when the precious metals were comparatively scarce, the different Sovereigns of Europe engaged in wars, and other operations which required a much greater quantity of money than they could readily command. In these difficulties they had recourse to the fraudulent plan either of diminishing the standard weight of the coin, or of making it of debased metal. Afterwards, when gold became more abundant, both gold and silver were coined into money. Pieces were struck to represent the assumed relative values of the two metals, but from a want of nicety and accurate knowledge of the subject, these two standards were always getting out of adjustment with each other, to the great detriment and annoyance of all who engaged in mercantile contracts. The inconveniences of a double standard were of too great importance to be continued in a mercantile country, and it

being necessary to select one, gold was for various reasons chosen, and the danger of a scarcity of currency necessary for a due development of the industry of the country is obviated by the ingenious system of Bank notes.

71. Since the currency any one possesses is evidence of services due to him, it is evident that when he requires some of these services to be rendered to him, the arrangement of the price or the value of the service should be left entirely to the mutual agreement of the buyer and seller. Who can tell so well as they what is the real value of the service? Now, suppose that when the price of the service was so agreed upon and settled between the parties, some artificial force were suddenly put into the power of either of them, beyond what arose from their natural position, to enable one of them to compel the other to yield up more of his industry than he ought to do; such a force suddenly put into the hands of either party, whatever its nature be, whether moral or material, would clearly be unjust in its very nature, and it would be nothing more than a force enabling one party to rob the other.

72. It is the divine command that man should live by his industry, and he has been endowed with powers and faculties to enable him to fulfil that command. A man's industry, therefore, and the fruits of that industry, are his sacred possession, bestowed upon him by the divine Author and Governor of the world. It may therefore be asserted in the broadest possible terms, that it is the natural right of every man to employ his industry and the talents which Providence has given him in the manner which he considers to be most advantageous to himself, so long as it is not to the injury of his neighbour. He has a natural right to exchange the products of his own industry with those of any other person who will agree to do it—to buy from whom he will, and to sell to whom he can. Any law which

seeks to check the course of this free exchange is inherently wrong, and though it may be permitted to take something from him for the necessities of the State, a law which seeks to despoil one class of the community of the fruits of their industry and give them to another is an intolerable violation of natural justice. Now, the primary idea which lies at the foundation of all property is industry; and if a man takes away any portion of another man's property, it may be considered as so much of his industry. Thus, if he wishes to sell any article to him and purchase gold with it, if he can by any means whatever force him to pay a higher price for it than he otherwise would, it is simply despoiling him of part of his industry, and appropriating it to himself.

73. Let us put this in a familiar way. Suppose Richard Stubble lives in the country and is a corn-grower, and his friend John Smith carries on his business in town, and has accumulated money by his frugality and industry. Having some corn to sell, Richard proposes to have a transaction with his friend John. The free marketable value of the corn is 40s. per quarter; but suppose that Richard has about a hundred times as much influence over the Legislature that John has, and he gets them to make a law by which he can compel John to pay him 50s. for what he could get elsewhere for 40s. That is, he takes away 10s., representing so much of his industry, from him against his will, for which he gives him no equivalent, and takes it to himself. In the mediæval ages great lords and barons used to keep armed retainers, whom they employed to plunder any unfortunate traveller who came within their power. In the nineteenth century great lords and gentlemen passed a law by which they forced traders to surrender to them a considerable portion of their property, against their will. Where is the moral difference between the two

cases? When one man forcibly and unjustly deprives another of his property, the precise method he may adopt for attaining his purpose does not materially affect the moral aspect of the thing.

74. It is no argument whatever to say, that the protective system was till lately established in this country, and is still in force in foreign countries, nor that it was supported and adopted by men of unblemished character and integrity. It is absolutely necessary that we should not suffer our estimation of the moral character of men to influence our judgment as to the soundness of their opinions. There scarcely ever prevailed a pernicious error in the world which was not supported by the authority of men of eminent personal excellence. The real question is not whether the men who hold certain opinions are estimable, but whether the opinions themselves are right or wrong. Few persons are either so good or so bad as their opinions. The fact is, that questions are examined with far greater intelligence and care now-a-days than ever they were before, and by this more comprehensive investigation, new considerations and relations are discovered, which may present them in very different lights than are apparent at first. Abstract right is every day obtaining a greater influence in legislation, and many of the most striking and beneficial reforms of the present day have been to abolish and set aside the partial and unjust laws which encumbered the statute-book. It is not so very long ago that public opinion in this country tolerated, and men of eminent piety saw no harm in the slave trade, in stealing men from their homes and transferring them to foreign countries to labor for the benefit of their masters. But public opinion gradually became convinced of its abomination, and not only put it down, but declared it to be a great crime. What was considered to be legiti-

mate traffic fifty years ago, is now declared by law to be piracy, and Englishmen who engage in it are liable to be dealt with as pirates. Now, there is not at bottom much difference in the ideas involved in protection and the slave trade. They both seek to effect the same object by somewhat different methods. They are both for the purpose of enabling one set of men to appropriate to themselves the fruits of their neighbours' industry—the one by the coarser method of force, the other by the more refined system of fraud. Mr. Macaulay remarks, that the two greatest and most salutary social revolutions which have taken place in England were those which in the thirteenth century put an end to the tyranny of nation over nation, and that which a few generations later put an end to the property of man in man. To these we may venture to add a *third*, not less great, and not less salutary than the other two—the great revolution in the ideas of the age which, in the nineteenth century, abolished for ever the property of one set of men in the *industry* of others.*

75. The protective system is, therefore, nothing more than a method by which producers endeavour to force consumers to pay a higher price than they otherwise would for their commodities. Now let us consider a somewhat different case.

76. Suppose that the Legislature, being entirely composed of consumers, should pass a law forbidding the farmers to sell their produce above a certain price, or to export it to foreign countries, where they might find a better market for it. Or suppose laws had been passed to prevent workmen from demanding above a certain rate of wages, or compelling producers to bring their productions to market, and accept a price for them much below what they would fetch if there were no such law. This

* History of England. Vol. I., p. 22.

would be a case on the part of consumers precisely analogous to what protection is on the part of producers.

77. This form of economic error never was sufficiently prevalent in this country to acquire a distinctive name in our language, but it did in France. During the height of the horrors of the French Revolution in 1793, when the insecurity of property had scared away almost all sorts of produce from the market, the French Convention passed the severest laws to limit the price of commodities, forbidding persons to sell their produce above certain fixed prices, whence they were called the laws of the *Maximum*. As might have been foreseen, these laws only aggravated the evil; and their disastrous effects are set forth with great minuteness in the 3rd, 4th, 5th, and 6th volumes of Alison's History of Europe (7th Edition), though the author overlooks the fact that the very same objections apply against the system of protection of which he is so strong an advocate.

78. Each of these systems, then, is erroneous, but in opposite directions; that of Protection, by which the producer obliges the consumer to buy from him his produce at a price above its intrinsic value; that of the Maximum, by which the producer is obliged to sell his produce to the consumer at a price below its marketable value. Now, every law whatever that interferes with the natural course of trade, which attempts to regulate the wages of labor or the price of commodities, which attempts to meddle with the free exchange of industry between man and man, must necessarily fall under one of these forms of error. Every such law sins against natural justice more or less, in one direction or the other, and is an aggression of one party on the other, either as it assumes the form of Protection or the Maximum; and it is just as clear as the sun at noon-day that the only

true, just, and proper course is to leave things to find their own level—or, in other words, to establish and maintain absolute freedom of trade.

79. Now, the idea that was at the foundation of all this legislation, was that the cost of production should govern price, and that persons who produced articles had a right to have remunerative prices secured to them by law. This idea was a very natural one to occur to producers, and when we think of the condition of Parliament at the time when this species of legislation was in fashion, we shall not be surprised at its having prevailed. In the last century, it is true, there were at various times laws enacted for the purpose of disturbing the natural course of trade, but the corn-laws, which lasted with various alterations till Sir R. Peel so happily abolished them, were made in 1815. Now, what was the state of Parliament at that time? One branch was entirely composed, as it still is, of agriculturists; the other principally of agriculturists and the nominees of agriculturists, as well as great manufacturers, great merchants, great shipowners, and great producers of all sorts. It was entirely a Parliament of Sellers—a vast, close, and corrupt combination. The great body of the people, *i.e.*, the consumers, had scarcely any influence whatever in the House of Commons. The sellers had a complete monopoly of law-making, and their legislation was exactly what might have been expected. All the producers in turn were permitted to plunder the public for their own benefit. It was nothing more than a gigantic conspiracy of all the sellers against all the buyers. Though these laws were intimately connected with currency, we cannot speak more of them, but they are a striking proof that no one man, nor can any single interest be entrusted to frame laws for the whole community in a spirit of justice, but to insure that all interests must have a voice.

80. In treating of prices, we have carefully adhered to the most general form of expression possible, "service rendered," in order more clearly to keep in view, that a service rendered may be of very different natures; such as moral, intellectual, or material, all of which are measurable by price, and all of which are the producer's property.

81. In former ages when people had scarcely emerged from barbarism, nothing was considered as property but *land*, which was solid and immoveable. As they became more civilised, and their ideas more refined, moveables were admitted to take rank as property; but still no property was held in regard but what was sensible to the eye and tangible to the hand. In process of time as refinement increased, men began to reflect that they had minds, and that their minds might be improved. Accordingly services rendered to the mind began to have value, and to be capable of being estimated in money. The way to render service to the mind is by communicating to it ideas, which convey to it perceptions of what is noble, and just and true, and elevate the nature of what is really and truly the MAN. When men saw this in its proper aspect, they saw that a person who was capable of rendering services to them in this way, should be allowed to have property in his own productions, as well as the producers of material wealth. Hence they recognised the right of man to have property in ideas. The law which gave men property in their own ideas, is called the law of *Copyright* or of *Patents*.

82. Just as the mind of man is admitted to be of a much higher nature than his body, so is the service rendered to his mind, of a much higher nature than one rendered to his body. Hence ideas are much loftier species of property than material wealth. True ideas

are the foundation of good government, and of the happiness and welfare of the whole human race both here and hereafter; and it should be the object of every man to gather true ideas wherever and whenever he can, and follow them in practice. True ideas are the riches of the mind; and they are preserved and propagated in books "exempted from the wrong of time, and capable of perpetual renovation. Neither are they fitly to be called images, because they generate still, and cast their seeds in the minds of others, provoking and causing infinite actions and opinions in succeeding ages: so that if the invention of the ship was thought so noble, which carrieth riches and commodities from place to place, and consociateth the most remote regions in participation of their fruits, how much more are letters to be magnified, which as ships pass through the vast seas of time, and make ages so distant to participate in the wisdom, and illuminations, and inventions, the one of the other."*

83. There is a peculiarity about the law of copyright and patents, which is worth noticing. No man can have property in a general truth, or a principle, but only in a particular demonstration of the truth, or an application of the principle. As soon as a general principle is discovered, it becomes universal property, and every one can appropriate to himself any new demonstration or application of it he can devise. No man can appropriate to himself a scientific truth, nor can he have a patent for a principle; thus he cannot have a patent for the general principle of the use of steam, or air, or electricity as a motive power, but only some particular form of its application.

84. Seeing then that the productions of a man's mind are now recognized to be as truly his own property and the fruits of his industry, as the production of material

* Bacon.—Advancement of Learning.

wealth, it is hard to see on what grounds he can be denied the same tenure in one as in the other. Surely no one can deny that a great work in literature is of as great a service to a country as a chair, or a table, or a ship; and yet the producer of one is not allowed to derive the same benefit from his services as the other. In the latter case, his right is acknowledged to be perpetual, and he may dispose of it as he pleases, and transmit it to his descendants as long as the thing continues in being, but the rights of the other are only transient, and after a certain brief period, by the existing law, cease for ever. The merchant who labors for commodities may found a family, and his descendants may be released for ever from the necessity of toil, through the wealth accumulated by their ancestor; but the descendants of the author, who may spend his life in producing a work which may adorn the literature, and be an everlasting possession to his country, may starve in the streets, while all the world may appropriate to themselves the profits made by publishing the works of their ancestor.

85. These things should not be. There can be no just grounds pointed out for the distinction. If an author's right in his own works exists at all, it exists for ever, and cannot be limited to 7, 14, 42, or any finite number of years, and just as the works of a Shakspeare, a Milton, or a Bacon, are a nobler possession for a country to inherit, than the most magnificent ship that ever floated on the ocean, so ought the rights of such a benefactor to his country to be preserved and guarded with as jealous care, as those of the other, in any state where the rights of property are held sacred.

86. Mr. Macculloch, in his Commercial Dictionary, argues against the expediency of extending the present term of copyright, 42 years, and while he doubts that any

advantage would accrue to authors, he thinks it would be detrimental to the public interests, and he instances a man computing a table of logarithms to five, or seven places, and says, that if his computations are correct, no improvement can be made upon them, to the extent at least to which they go; and he then asks, if he, or his assignees are to be entitled in all times to prevent other persons from publishing similar tables, as an invasion of private property. Mr. Macculloch does not seem to be happy in his arguments on the question, and he is still more unfortunate in the instance he has selected to illustrate them, because a table of logarithms is a scientific truth, in which no one can have copyright, and is an instance of the exception stated in Section 83. The logarithm of a number, or of any other quantity, is a scientific truth or result which every one is at liberty to calculate for himself in his own way, and if any one were to discover a new method of calculating logarithms, he would undoubtedly be entitled to copyright in that. But no one can have copyright in the actual result, any more than in any other scientific truth. Mr. Macculloch further states that in his opinion, more injury than benefit would result to literature from making copyright perpetual, but he gives no ground for such an opinion, and the benefit or otherwise to literature is wholly beside the question, which is, what are the *rights* of authors? The copyright of Clarendon's History of the Rebellion is the perpetual property of the University of Oxford, and we may well ask why that University should be permitted to have a perpetual copyright rather than an author. The University evidently deems it an advantage to possess this property, and the question is not the advantage of the public, but the rights of property. It would be an undoubted advantage to the public, and a great benefit to agriculture, if

many of the gigantic estates in this country were broken up into smaller ones, and in the hands of more numerous and enterprising owners, but none but a few wild dreamers think of such an invasion of the rights of private property. Now the right of an author in his own book is just as sacred as his right to his own land, and he ought no more to be deprived of one than the other.

87. The progress in the public mind evidently tends in this direction; something was done by the last Act, but the advancing voice of refinement, and the increasing perception of moral right, will probably demand more. Let us hope that the day is coming when the owners of the ideal ships that sail down the seas of time, freighted with the hoarded treasures of the wisdom, and learning, and worth of successive generations, to illumine the understanding and gladden the hearts of the latest posterity, may enjoy, and transmit to their descendants, the same rights as the owners of the wooden and iron ships, which bring corn and cotton, and whatever else ministers to the material requirements of mankind.

CHAPTER III.

UPON THE DIFFERENT SUBSTANCES USED AS CURRENCY BY DIFFERENT NATIONS.

USE OF GOLD AND SILVER AS MONEY BY THE JEWS—EGYPTIANS—GREEKS—LEATHER CURRENCY OF THE SPARTANS AND CARTHAGINIANS—MONEY OF THE ROMANS—SKETCH OF THE CHANGES IN THE CURRENCY OF GREAT BRITAIN.

1. The earliest instance of the use of a currency of any description we have recorded in authentic history is the passage in Genesis,* where Abraham bought the field of Machpelah for 400 shekels of silver, and we observe from the terms used, that this practice had been long established, and we have no information when, or with whom, it originated. The metal used as currency was silver, and it was measured by weight, and we know that the Jewish merchants were in the habit of carrying about with them scales and weights for the purpose of weighing out the price of their commodities. The Jews up to the time of the captivity had no coined money; it is true that in Gen. xxx. 19, Jacob is said in our translation of the Bible to have purchased the land of Hamor for one hundred *pieces of money*. In the Septuagint however, the word is translated "lambs," and that is the most usual meaning of

* Gen. xxiii. 14, 15, 16.

the Hebrew word "Kesitah." As we know that in pastoral countries, sheep and oxen were used in the earliest times as standards of value, it has been conjectured that lambs were really the price given.* The same word occurs in Job. XLII. 11, but as it is well known that the widest differences of opinion prevail among the most learned biblical critics, as to the period when that book was written, we cannot fairly use it as any authority on the subject. The recent discoveries, however, of Sir Gardner Wilkinson in Egypt, and Mr. Layard in Assyria, enable us, we think, to give a satisfactory explanation of the word. We may see in the paintings copied in these works, pictures of Egyptians and Assyrians weighing out the precious metals, with weights in the form of lambs, antelopes, and other animals, and we may fairly infer that the true meaning of the word here is one hundred "lambs" weight of silver. So late as the reign of David, gold was not used as a currency, but only as a precious commodity. After the captivity the Jews used Persian, Grecian, and Roman coins, and it was not till the time of the Maccabæan Princes, long after the date of the latest books acknowledged by protestants to be canonical Scripture, that Antiochus† permitted them to have coined money of their own. In Gen. xx. 16; xxxvii. 28; xlv. 22;‡ where pieces of silver are mentioned, they may perhaps have been ring ingots of bullion, like the Egyptians and Assyrians used.

2. The first mention we have of coined money is in 1 Chron. xxix. 7, and Ezra ii. 69, where our English version speaks of *drams* which is a mistranslation for darics, which were Persian coins. The Chronicles we

* Goguet. Origin des Arts. I. 290.

† 1. Macc. xv. 6.

‡ In these two latter places where our version has "silver," the Septuagint has "gold."

know were compiled after the return from the captivity. The term used by the Jews to denote buying always involved the idea of weighing; thus, in Isaiah lv. 2, where we read in our version, "wherefore do you *spend money* for that which is not bread," the word in the original means to *weigh*.

3. We are not much acquainted with the monetary transactions of the Egyptians, they, like the Jews, were decidedly an uncommercial people, and chiefly depended upon agriculture. They had, however, made considerable progress in many of the arts, and had early discovered the beauty and utility of gold. This metal was used as money in Egypt before silver, and the latter was called "white gold."* Both metals were afterwards used as currency, and they were made up into the form of rings for that purpose, though it does not appear that they were entitled to be considered as *coins* from that circumstance, from having any stamp to denote their individual purity and weight, as we observe in the plates in Wilkinson, that they were weighed in the gross with different weights, in the shape of oxen and lambs, and other animals, from which it is clear that they were merely circular ingots of bullion. The Egyptians used also unstamped copper as money, and this tedious system of weighing out the price of every commodity continued so late as the time of the Ptolemies, and was only gradually superseded by the use of Grecian coins.† The use of this ring money continues to the present day in Semnaar, and the neighbouring countries.

4. The Persians, however, had introduced coined money into Egypt previously to the Ptolemies. Aryandes, governor of Egypt under Darius and Cambyses, had struck silver coins in imitation of the golden ones of the

* Wilkinson's Popular Account of the Ancient Egyptians, II. 147.

† Ibid. II. 150.

Persian Empire, for which invasion of sovereign authority his master struck off his head. The use of these silver coins seems to have been discontinued when the Persians left the country. Herodotus bears testimony, that these "Aryandics" were the purest silver coins existing in his day. (IV. 166.)

5. The period and the author of the invention of coining money are wholly unknown. Goguet (I. 289) says, that some authorities declare that the Assyrians invented it before the time of Abraham. Herodotus says, that the Lydians were the first nation he knew of who coined gold and silver.* The meaning ordinarily attached to this expression is, that they were the first to coin gold money and silver money; but when we compare the expression with the fact, we may, perhaps, think that was not the historian's meaning. For the earliest coins that are found are the Lydian staters, which are made of *electron*, a mixture of three parts of gold and one part of silver. The historian probably meant, then, that the Lydians were the first to coin money, of a mixture of gold and silver. These coins were merely lumps of a certain weight, and were struck on one side only,† with the blow of a hammer, which impressed upon them the figure of a lion's head or other emblem. The earliest coins of real gold were those of Darius (Herod. III. 96; IV. 166.), though it would certainly appear, as Baehr says, that they were not intended to be used as money at first, but only as medals, commemorative of Darius, and that their use as money gradually sprung up afterwards.

6. In the times of the Homeric poems, there was

* I. 94. Πρῶτοι δὲ ἀνθρώπων, τῶν ἡμεῖς ἴδμεν νόμισμα χρυσοῦ καὶ ἀργύρου κοψάμενοι ἐχρήσαντο.

† Wilkinson, II. 150.

no metallic currency of any description in Europe, or the Greek states of Asia; gold was a commodity, and its value was estimated in oxen, the usual standard of a pastoral people. Thus, Minerva's shield has one hundred golden tassels each of the value of one hundred oxen;* and he laughs at Glaucus, who exchanged his golden armour for the brass armour of Diomede,† one hundred oxen, for nine oxen. When the vessels from Lemnos came to the Greek camp freighted with wine, the Greeks purchased it with brass, iron, ox hides, oxen, and slaves.‡ In Odyssey I. 430, we read of Euryclea, whom Laertes purchased for twenty oxen. Some commentators indeed assert, that the word used for purchase in the passage, only applies to *buying*, and that the true meaning of the passage is that Euryclea was bought with as much bullion as would purchase twenty oxen. This would be parallel to the passage in Scripture already quoted, where Jacob paid "lambs" or "pieces of money." But the plain meaning of the words seems repugnant to such a construction, and we have little doubt that the meaning is, that the slave was bought with oxen.§ All the words in Homer expressive of wealth,

* Il. II, 448. Τῆς ἑκατὸν βύσανοι παγχρύσεοι ἠερέθονται,
Πάντες ἐϋπλεκέες. ἑκατόμβοιος δὲ ἕκαστος.

† Il. VI. 234, Ἔνθ' αὖτε Γλαύκῳ κρονίδης φρένας ἐξέλετο Ζεὺς,
Ὃς πρὸς Τυδείδην Διομήδεα τεύχε' ἄμειβε,
Χρύσεα χαλκείων, ἑκατόμβοι' ἐννεαβοίων.

‡ Il. VII. 468. Νῆες δ' ἐκ Λήμνοιο παρέστασαν οἶνον ἄγουσαι
* * * * *
Ἔνθεν ἄρ' οἰνίζοντο κάρη κομόωντες Ἀχαιοι
Ἄλλοι μέν χαλκῷ ἄλλοι δ' αἴθωνι σιδήρῳ
Ἄλλοι δὲ ῥινοῖς ἄλλοι δ' αὐτῇσι βόεσσιν
Ἄλλοι δ' ἀνδραπόδεσσιν.

§ Od. I. 430. Τήν ποτε Λαέρτης πρίατο κτεάτεσσιν ἑοῖσιν
Πρωθήβην ἔτ' ἐοῦσαν, ἑεικοσάβοια δ' ἔδωκεν.

Some contend that there was money in those days stamped with the device of an ox, hence called *βους*, which is alluded to here. If this

denote the possessions of the owners in cattle, or herds, or horses,* and most of the Greek words signifying purchase, spring from the names of animals which were given in exchange.†

7. The honor of the first coinage among Europeans is generally allowed to be due to the inhabitants of Ægina, a state whose growing celebrity was eclipsed and extinguished by her neighbour and rival Athens. Pheidon, king of Argos, is said by Herodotus to have been the first to introduce weights, measures, and coins into Greece, about 895 B.C., and these coins were struck at Ægina: like the Lydian ones, they were merely lumps of metal, which seem to have been placed on a block and struck with a hammer, which impressed upon them the device of a turtle or tortoise. The coins of Syracuse and Magna Græcia are not earlier than 700 B.C., and they, as well as all the other coins up to 500 B.C., were merely lumps of metal stamped on one side. Even the gold Darics had a figure only on one side—an archer kneeling on one knee.

8. Silver was the earliest and long continued to be the only currency in Greece. All the usual expressions in Greek relating to money were originally taken from silver, and not from gold, and continued to be so to a very late period, though afterwards bronze and gold were used

be so—and there is certainly old authority for the opinion (Arbuthnot's Ancient Coins, p. 27)—there is no reason why a similar meaning should not be given to the passages quoted from the Iliad, and this would much alter the generally received opinion.

* Thus *πολυάρην*, *πολυβούτης*, *πολύϊππος*. And as we never find that any expression relating to money is used as significative of wealth in Homer, we may justly doubt the views of those authors who think that the coin *βους* was current in Homer's day.

† Thus *ἄρνυμαι* from *ἄρς* a lamb; *πωλέω* from *πῶλος* a foal; *ὀνέομαι* from *ὄνος* an ass.

in the same sense. It is said that there was no gold at all in Greece till the time of Crœsus, who gave Alcmæon as much as he could carry (Herod. VI. 125), and this was the foundation of the great fortune of that family.

9. The first silver currency at Athens was struck in 512 B.C., and it was always remarkably pure, so that it would always fetch a premium in any other market.*

10. Though silver was the currency of the state, the gold coins of foreign nations, and especially Persia, circulated at Athens. They made no attempt to coin gold till about 407 B.C., when a debased gold coinage was issued, which is called bad copper by Aristophanes. No pure gold coinage was struck at Athens, nor indeed in any state of Greece proper, till the time of Alexander the Great, though it was common in the Asiatic states, and Macedonia, where there was abundance of gold.

11. Copper, or bronze, was very little used by the Greeks in early times in coins, but in the year 406 B.C., when Athens was reduced to the last extremity, a considerable coinage of copper was issued, which was soon afterwards called in, and the silver standard restored. After the time of Alexander the Great copper money became common at Athens.

12. There was one exception to the use of silver as a currency among the Greek states, namely Sparta or Lacedæmon. Ancient tradition asserts that this was due to Lycurgus. The parentage and date of this famous hero seemed to be as much disputed as those of Homer himself. But assuming him not to have been altogether a mythical personage, the story runs, that having been driven abroad by domestic troubles, he travelled extensively in foreign countries, studying their manners, customs, and institutions. Recalled at length to allay the

* Xenophon de Vect.

feuds of his distracted country, he framed the Spartan policy which endured for 700 years. From his observation of foreign countries he seems to have anticipated the sentiment of the Apostle, not to mention a host of pagan writers, that money is the root of all evil, and he conceived the extraordinary idea of totally prohibiting the use of gold and silver to his countrymen. Whether we acquiesce in the current of tradition in attributing it to the influence of an individual legislator, or whether we ascribe it to the morose genius of the people, the fact is certain, that from very early times indeed, until the latest age of the state, it was totally forbidden to any private Spartan to possess gold or silver. The native iron of the country, so tempered as to be useless for any other purpose, was formed into little bars at first, afterwards into a more convenient form, and was the only legal currency at Sparta until very late times. It is also averred that leather was used for the same purpose.* This is the first example we have of a currency which was intrinsically worthless.

13. The invention of a paper currency as the representative of specie has been considered as a great triumph of modern ingenuity, but in this we have only revived a very ancient practice. Whether the Spartans used a leather currency may be doubtful, but it is quite certain that the Carthaginians had a leather currency, which was prepared with great care and issued by the state. In the Dialogue upon Riches attributed to Æschines the Socratic philosopher, he says:—"We must look to the sort of money. The Carthaginians make use of the following kind; in a small piece of leather a substance is wrapped of the size of a piece of 4 drachmæ, but what this substance is, no one knows except the maker. After this it

* Thirl. Hist. of Greece, I. 325.

is sealed and issued for circulation; and he who possesses the most of this is regarded as having the most money, and as being the wealthiest man. But if any one among us had ever so much, he would be no richer than if he possessed a quantity of pebbles."* Heeren remarks that the stamp evidently denoted the value at which the note was to pass current; and this unknown substance was to prevent forgery. This was the period when Carthage was at the height of its power and prosperity.

14. We thus see that the advantages of an artificial currency were recognised in very early times; and we may conjecture that this invention had originated in very remote ages, for we are expressly informed by Suidas that leather was the currency used in Italy till Numa Pompilius introduced a bronze currency into Rome.† The use of this leather currency seems to have been very wide spread, and we have nothing to guide us to decide whether it originated in Italy and was communicated to the Carthaginians by the Etrurians, or the reverse. When Suidas says that the Romans used a leather currency we may safely conclude that they only followed the practice of the surrounding nations from which they were the off-scourings.

15. When a nation is so far advanced in civilization as to use a metallic currency instead of the commodities themselves, it is natural for them to select the metal which is most accessible to them. Thus the Egyptians used gold; the Greeks silver; the nations of Italy used a leather and shell currency, as we are told by Suidas, from the remotest antiquity, and when they came to use a metallic one, copper, being the metal which Italy produced

* Quoted in Heeren's Researches into the Politics, &c., of the Carthaginians. Vol. I. Oxford. 1832. p. 146.

† Arbuthnot's Ancient Coins. p. 3. Edit. 1727.

in the greatest abundance, was chosen by the native states. In Magna Græcia, as far north as Campania, a silver currency was in use. The accounts differ as to who introduced a metallic currency among the Romans, some making it Numa Pompilius, from whom they they derive the word *nummus*, and others Servius Tullius. The metal used was a composition of copper and tin, which they called *æs* and we call *bronze*. From this metal being the earliest used as a currency, all the words in Latin relating to money are derived from bronze, just as in Greece they were derived from silver. Hence the treasury was called *ærarium; æs militare* was the soldier's pay; *æs circumforaneum*, money borrowed from a banker, as the bankers kept their shops round the forum; and a number of other expressions. Even so late as Justinian gold and silver money was still called æs. Thus, *etiam aureos nummos æs dicimus*. Digest. L. til. 16., s. 159.

16. As we know that the inhabitants of Italy were a pastoral people, we may assume from analogy that sheep and oxen were their first measures of value. We have no certain information whether they used metal in the form of ingots before that of coins. It appears probable that Numa introduced it in the form of ingots, and Servius Tullius impressed a device upon each ingot to denote its weight. The earliest Roman coinage was not stamped, but cast in a mould. In the British Museum there is a specimen of four of these early coins joined together as they came out of the mould. As it was necessary to have some device upon them, the Romans adopted the practice which seems to have been universal among nations when they first adopted a stamped metallic currency, of having a representation of what they considered as wealth—cattle of some kind. The earliest

Roman coins had the figure of cattle upon them, hence they were called *pecunia*, from the device, as the βοῦς a Greek coin, and the Florin, from the Florentine lily *fiorino*.

17. The original Roman coin was the "As," a full pound weight of bronze, and this continued to be the sole national coinage until the 485th year of the city, or 269 B.C., five years before the first Punic war, when silver was first coined. During the first Punic war (264-241 B.C.) the scarcity of the coinage was felt, and the Romans seem to have been the first to discover the method of paying off their debts by lowering the standard. During the first Punic war they reduced the As from twelve ounces to two, and so wiped off five-sixths of their public debt; and in 217 B.C. the As was still further reduced to one-half of its weight, or to one ounce.

18. The coining of money, and the device it is to bear, is usually considered to be one of the peculiar prerogatives of the State, and most jealously guarded; but at Rome, every individual, or family, had the remarkable privilege of being allowed to have their own silver coined with such a device or legend as they pleased, with the restriction that its value required to be stamped upon the coin, and their purity and weight certified by the public officers; many of these private coins are extant.*

19. Gold being a foreign commodity, and not found in any part of Italy that was subject to the Roman dominion till the later ages of the Republic, had no currency at Rome until they came to have an extensive foreign commerce, and was not coined there till 207 B.C., sixty-two years after the coinage of silver. The Roman coins, both of silver and gold, underwent great variations of weight in the progress of the Republic and the Empire,

* See articles *Moneta* and *Denarius*. Smith's Dictionary of Roman Antiquities.

which would not be suitable to our design to detail here; but they will be found in several works specially devoted to numismatics.

20. The Romans did not adopt the Carthaginian plan of having a leather currency stamped by the authority of the State, which corresponds to the paper money of modern times; but we shall see that they invented and practised the use of Cheques upon Bankers. The question whether they are to be considered as currency depends upon whether they were negotiable, or the contrary. If they were a mere order to pay a certain individual, which he could not transfer to any one else, it is clear that they could not be current like the leather money of Carthage. We are not aware whether this point has been satisfactorily ascertained, and until it has been so, it is impossible to decide whether these Cheques are to be considered as currency. The privilege which private families enjoyed of having their own silver coined with their own device was abolished by Augustus, with the exception that the Senate was permitted to coin bronze money, which was stamped with the letters S. C. *(Senatûs Consulto)*.

21. All the coinages of these three different metals appear to have been legal tender indifferently at Rome. The inconvenience of a multiplicity of standards never seems to have been felt by the nations of old, and their money-dealing perceptions were not acute enough to lead them to trade in the coins themselves, on account of the difference arising in their value from a variation in the relative quantities of each. Probably these mutations in their relative values were too slow to give any scope for it, though we know, by the testimony of ancient authors, that their relative values were very different at different

times. At the end of this chapter we have collected some notices on the subject.

22. During the flourishing ages of the Roman Empire the precious metals were quite as abundant as they are in modern times, at least till the recent discoveries in California and Australia; and in the early days of the Jewish Monarchy they were more plentiful than anything we can have the least idea of, as appears from the testimony of the Scriptures. As the Roman Empire decayed the supplies of gold fell off, and the quantity in circulation progressively diminished.

23. The ring money of the Egyptians and Assyrians seems to have spread all over the Celtic nations of the West, and the Scandinavian nations of the North, and it continued in use until it was superseded by the solid coins of the Romans. Cæsar says that the Gauls used for money gold and iron rings of a certain weight. The iron rings have long since perished, but very numerous specimens of the gold ones have been discovered, especially in Ireland. These nations made considerable advance in monetary skill beyond the Egyptians, as it is satisfactorily established that the Irish ring money possessed the essential features of a true coinage, that all the pieces were of a certain defined weight, and the larger ones are all multiples of a certain unit. The smallest ones, being weighed by Sir William Betham, were exactly a half-pennyweight, and the larger ones were all multiples of that unit. Great numbers of specimens of this ring money have been discovered, forming a remarkable series, which exhibits a regular progress in the art, from the rudest description of a plain wire bent round up to a very highly decorated series of coins. Bronze ring money has also been discovered graduated to a similar scale of weights.

24. In Britain, the more convenient solid discs of metal which formed the Greek coinage were in the process of displacing the original ring money when Cæsar invaded the country. He says, "they have both bronze and gold money, or, instead of money, rings adjusted to a certain weight." The conquest and pillage of Delphi by the Gauls in the third century B.C. had spread the use of the Greek coins and letters throughout Gaul and Britain, and the Britons, like other nations, employed the great staple native metal for the purpose of money. They made rude and barbarous attempts to imitate the Greek coins in tin, which were first struck with Greek letters, and afterwards with Roman. As these coins were imitations from the Greek, they had figures on both sides. It does not appear from Cæsar's account that silver was used as money in Britain.

25. After the Roman conquest the Roman letters and coins entirely displaced the native ones. Cunebolin is said to have visited Rome in the time of Augustus, and to have taken back with him Roman artists to execute his coinage. Specimens both of his silver and gold coinage exist; and after his time the coinage was entirely Roman. When the Roman dominion in Britain perished their coinage also ceased, and was succeeded by the Saxon, which is of a totally different character. The Saxons imported also a different set of weights and measures.

26. The influence of the Byzantine Empire, which shews itself so conspicuously in the rude architecture of the East and North of Germany, also extended to their weights and measures; and the Cologne weight, which the Saxons used, is thought to be derived from the Lower Empire. The Saxons introduced this weight into England, where it was called the Tower weight, in consequence of the Mint being placed in the Tower. This was the

standard money weight of England till Henry VIII. substituted the Troy weight for it, which still continues to be the legal standard of this country.

27. During these barbarous ages gold seems almost to have vanished from the country, and it was certainly quite disused in any native coinage, though gold bezants of Byzantium continued to circulate. The money which the Saxons first introduced was called *skeattie*, of the value of about the twentieth part of a penny; but these were superseded by the celebrated silver penny, which continued to be not only the standard, but the only coin of England till the reign of Edward III.

28. At the time of William the Conqueror, the silver penny was the only coin in existence; but the Saxons introduced the notion of an imaginary coin for the purposes of account, which was called the *scil* or *scilling*. This sum was sometimes used to denote four, and at others five pennies. William I. established the Saxon schilling at four pennies, and the Norman at twelve—the latter being equally only money of account, and not an actual coin till the time of Henry VII. Copper had disappeared from circulation in coinage, and was not used again for that purpose till many centuries later.

29. About this time the term *sterling* came to be applied to English money, by which it was distinguished on the Continent, as it still is. There are various etymologies given for the word,* but the most probable is that it was derived from the festival of Easter, when official examiners visited the mint, and examined the coinage. The word "Easter" is derived from the Saxon goddess Eastra, whose festival fell in April, and as that nearly coincided with the great Christian festival, April was usually called *Eastermonat (Easter month)*.

* Ruding's Annals of the Coinage. Vol. I., p. 7.

30. Previous to the union of the different petty kingdoms of the Saxons, each of the kings, archbishops, and several of the bishops, exercised the right of having a distinct coinage; but this privilege was abolished by Athelstan, with the advice and concurrence of a grand council, who decreed that there should be but one money throughout the kingdom. But while all subjects were forbidden to mint independently, many of them received grants from the Crown to mint on its behalf, and in early times there were instances of royal, episcopal, and abbatical mints existing at the same time in the same place; and this privilege was not wholly abolished till the middle of the sixteenth century.*

31. The proportion of pure silver to alloy in the standard or sterling coin, the penny, was the same as is used at the present day, viz., 11 oz. 2 dwts. fine to 18 dwts. alloy. In the Mint indenture of 1357, this is called the "old right standard of England,"† and this seems to have ever been adhered to with regard to the esterlinges, till 1543, by Henry VIII. But when halfpence and farthings, which were originally made by cutting the penny into two or four pieces, were made separate coins, a different alloy was ordered for each coin, and the pound weight of bullion was ordered to be cut in different proportions. Thus the *Rotulus de Monetâ* of the seventh and eighth year of Edward I., containing his regulations respecting the coinage, ordains that the great money of four esterlings (the groat) should be of the standard value. Also, that the farthings should be round, instead of quadrants, as before; and because they would be too weak and small with the same alloy as the penny, they

* Report of the Royal Mint Commission. P. 5 (1849).

† *Ibid.* P. 34.

were to have more alloy,* and they were to be made of the weight of sixty-five shillings and eightpence to the pound,† and they were to have a standard appropriate to them in the same manner as the esterlings. Extremely minute regulations were laid down as to the coin being of the exact weight, if it were found to vary from it by a very small quantity it was not to be received.

32. Henry III. issued a coinage of gold pennies of the weight of two sterlings, which passed at first for twenty and afterwards for twenty-four pennies of silver. Ruding says that this was the first coinage of gold in modern Europe; they did not remain long in circulation.

33. Although none of the Sovereigns had depreciated the quality of the metal, nor diminished the weight in the coin, an immense quantity of forged and clipped coin was in circulation. There being no coin lower than the penny, must have been an intolerable inconvenience to poor people in their small purchases, and as the Royal Mint did not supply them with small change, others did. The expedient of breaking up the penny into halfpence and farthings was not sufficient to supply the want, and great quantities of base coin were not only manufactured at home, but imported from the Continent. Numerous efforts were made by every Sovereign to put down this practice, which may be seen detailed in Ruding, which were wholly unavailing. After the disastrous reign of Henry III., the coin had been clipped down to half its weight, the prices of everything rose in a corresponding proportion, and foreign merchants refused to bring their

* Royal Mint Com., p. 9 :—"Et par ceo qe le ferling serroit trop feble e trop petit de tiele lai come lesterling si est, par non qe por ceo il i at aveant plus de loi."

† "Et est a savoir qe il serroit de pois de seissante e cink souz e wit deniers a la livre."

goods into the country. Edward I. carried through the great work of an entire re-coinage, but by the end of the unfortunate reign of Edward II. it was as bad as ever, and base coins called *crocards* and *pollards* were obliged to be legalized until the Royal Mints could provide a better currency.

34. The great scarcity of silver, which did not increase in proportion to the increasing wealth of the nation, caused the first reduction in weight from the old standard by Edward I. in 1301, who coined 243 pennies out of the pound of silver. This was carried much farther by Edward III. The silver penny or sterling, which had weighed 22½ grains of silver since the conquest was reduced successively to 20¼, 20, and at last to 18 grains.

35. The year 1344 is memorable as the date of the permanent restoration of gold, as a material of currency of England, by Edward III. Three different coins were ordered to be struck, and called florins, maille florins, and farthing florins, of the value of 6*s*., 3*s*., and 1*s*. 6*d*. They were called florins from the gold coin of Florence, but with little reason, as they did not bear as a device the beautiful Florentine lily which gave its name to the coin, but the lions of England, termed leopards in Heraldry. This coinage, however, being rated too high, merchants refused to receive it, and it was recalled. A new coinage was devised called nobles, worth 6*s*. 8*d*., half and quarter nobles. They were considered to be the most pure, valuable, and beautifully executed coins of their day, and they were so much superior to anything on the continent, that they were secretly exported, notwithstanding all the severe laws to the contrary, and in consequence of this a lighter coinage was issued.

36. Nothing farther occurred in the coinage which we are called on to notice, till Edward IV. in the four-

teenth year of his reign, reduced the quantity of silver in the penny to 12 grains. About that time the relative value of the precious metals began to change perceptibly, and the first issue of nobles was ordered to pass current at 8*s.* 4*d.*, and from this period frequent tamperings took place with the weight of metal put into the different coins.

37. The 18th of Henry VII. (1503) is remarkable as the first time when the old Saxon money of account, the shilling, was reduced to an actual coin; as this contained 144 grains of silver, and a modern shilling contains 80·7 grains, it was intrinsically worth 1·9·408d. of our money. This year, in which a great re-coinage was effected, was further remarkable as the one when the 20s. piece, called the sovereign, was first struck. Twenty-two and a half of these pieces were formed out of the pound tower. As the pound tower contained 5,400 grains, there were 240 grains of gold in each of these coins. The modern sovereign contains 113·12 grains of pure gold, so that the sovereign of Henry VII. was intrinsically worth £2 2s. 5d. of our money.

38. Henry VIII. reduced the penny to ten grains of silver, by debasing the "old right standard of England" to two ounces of alloy to ten of silver, in his third coinage; and in the fourth, while they continued of the same weight, the alloy was increased to one-half. The gold coinage was also debased, so that the sovereigns were declared equivalent to 22s., and afterwards to 21s. 6d. He also caused the pound troy to be substituted for the pound tower, the former being three-quarters of an ounce heavier than the latter.

39. The previous gold coins had been made of extremely pure gold; several different standards were used in the different gold coins current at the same time,

which cause great intricacy in settling their relative values, but Henry VIII. established the standard which is still in use—twenty-two carats fine to two carats alloy.

40. The latter years of Henry VIII., as well as the short reign of Edward VI., are full of the utmost confusion in the coinage. The standard of silver was so debased at last that it had nine ounces of alloy to three of silver; and this caused such a derangement in prices, that the ounce of bullion rose to 12s., and the old angels, which were equal to 6s. 8d., when coined brought 21s. of this debased currency. The relative values of the precious metals were so little understood, that while silver was rated at 12s. the ounce, gold was only valued at 60s., or five times the value of pure silver, and it was reduced still further to 48s. in the third year of Edward VI. The debasing of the coinage reached its lowest depth in this reign.

41. At length, in 1551, when the intolerable state of the coinage gave rise to serious public commotions, a great reform took place. The silver standard was raised to 11 oz. 1 dwt. fine to 19 dwts. of alloy, being only 1 dwt. worse than the old national standard, and while silver was rated at 5s. 5d. the ounce, gold was rated at 60s., being a little more than 11 to 1.

42. The complete restoration of the coinage is due to Queen Elizabeth, who began it by the rather vigorous measure of ascertaining the amount of the silver in the base coinage, and then stamping it, made it pass for only its true value. By this measure, people who possessed these coins suddenly found them reduced in value from 12d. to $2\frac{1}{2}$d., another example of the old observation—

"Quicquid delirant reges, plectuntur Achivi."

The old national standard of 11 oz. 2 dwts. to 18 dwts.

of alloy was restored. The illustrious Gresham was the prime mover in this great national reform, and the Queen took so much interest in it that she went to the Mint and coined pieces of fine money with her own hand. The silver penny, however, which weighed 8 grains at the beginning of her reign, was reduced to $7\frac{3}{4}$ at the end of it.

43. A great improvement was effected not only in the purity of the metal, but in the method of making the coin. From the time when gold and silver were first coined it had been done by a hammer and punch. The coins produced by this means were never circular, but had a ragged edge, which offered great temptation to clippers, and most of those which had been in circulation for any length of time were clipped away, more or less, some to half their proper size. The mill and screw were now introduced, which insured the coins being accurately circular. There were also, as has been already observed, two standards of gold, one of which having been discontinued, need not be particularized. The other, which is still used, was crown gold, of which the pound troy was coined into 33 sovereigns of 20s. This extremely inconvenient plan of having two standards of gold was continued by James I. He coined the pound troy into $33\frac{1}{2}$ sovereigns, but the bullion merchants having discovered that the gold and silver coins were not properly rated at their market value, there being a considerable excess in the quantity of gold in the gold coinage, melted them for exportation; to remedy this the pound was coined into 37 sovereigns, with a piece of the value of 4s. over. In the language of the present day we should express this by saying that the Mint price of gold was £37 4s. the pound, or £3 2s. the ounce. This is the second instance we have observed of the insuperable objection to having two metallic standards of value, because

of the impossibility of keeping the coins at their relative values, according to the value of the bullion, and whenever the standard gets out of adjustment that coin which is underrated, or which contains more metal than it ought to do, is immediately melted down, and disappears from circulation.

44. Charles I. issued coins of the same weight and purity as his father, the silver penny was $7\frac{3}{4}$ grains, and it must ever be mentioned to the honor of that unfortunate prince, that he never debased the coinage, but that even during the height of his troubles, all his coins, and siege pieces which he issued when he could no longer coin, were always of full weight and purity.

45. Soon after the restoration of Charles II. the old national coin of England, the silver penny, ceased to be coined for circulation. The lowest silver coin struck after this for circulation was the sixpence, all below this was merely struck for distribution as maunday money. In 1664 a splendid gold coinage of £5, £2, and 20s. pieces was issued. The latter were called guineas, being made from gold brought from Guinea by the African company. The guinea was intended to be a 20s. piece when struck, thus representing a pound in numerical value, as well as the sovereign of Henry VII. In 1670 the pound of crown gold was coined into $44\frac{1}{2}$ pieces, which was the standard weight of guineas as long as they continued to be coined. In this reign a very important Act was passed (Statute 1666. c. 5) for the purpose of encouraging private persons to bring bullion to the Mint, by which all charges upon the coinage of it were abolished, and any one who brought bullion to the Mint was entitled to receive back its full weight in coin without any deduction.

46. We have seen that the smallest national coin of England for a considerable time being of so high a deno-

mination as the silver penny caused very great inconvenience to traders and the common people, and they were in the habit of breaking up the silver penny into halfpence and farthings by means of the cross which it had as a device. This however being insufficient for the purpose, immense quantities of base money from the continent were imported and circulated in England, and this was imitated by the monasteries, and was called by a great variety of different names. But even this was not sufficient for the purposes of trade, and many traders about the reign Henry VIII. began to issue private tokens of lead to represent halfpence and farthings. This practice continued through the succeeding reigns, and in that of Elizabeth almost every tavern had its issue of these tokens with its own device, and many of these seem to have been very creditable specimens of coinage. These tokens both of private persons and of town corporations having increased to a great extent, the Government of Queen Elizabeth determined to supersede them by a national coinage of copper, but this design was never fully carried out. It was revived in the reign of James I, but the royal prejudice was so strong against having a national currency of copper, that he did not permit it to be coined at the Royal Mints, but granted patents to private persons to do it. The same prejudice continued through the reign of Charles I. and Charles II. until the year 1672, when the copper currency became so popular that it was coined at last at the Royal Mint, and has since continued to be used in the legal coinage of England.

47. During all this time both gold and silver were equally legal standards, that is, persons might discharge their debts in either metal to any amount. The commercial ideas of the age were not sufficiently advanced to discover the total impossibility of permanently fixing the

relative values of any two substances whatever, consequently when an unlimited issue of both gold and silver took place, either their relative values were not rightly appreciated at the Mint, or they were frequently altering through the ordinary operations of trade, and the relative values of the coins had to be altered by proclamation.

48. At the time of the revolution in 1688, the silver coinage of the country had fallen into the most degraded state. The mill and screw method of coining had been discontinued, and the old way of hammering revived; and the usual malpractices immediately flourished, little attention having been paid to preserve the integrity of the coinage most of the old hammered money had become thin and clipped, and an immense quantity of counterfeit coin was in circulation. This inconvenience began to be felt about the end of the reign of Charles II., continued and increased during that of James II., and, after the revolution, became so serious that several Acts of Parliament were passed in the vain hope of altering the nature of things by law. The state of the silver coinage was so disgraceful that a guinea, originally coined to be worth 20s., had successively risen to 22s., and at length, in 1694, was as high as 30s., and it was alleged that the shillings contained scarcely three pence worth of silver.

48. This great inconvenience attracted the attention of Parliament, and on the 8th January, 1695, a Committee was appointed to consider the subject. It is said* that the clipping and adulteration of the coin "had increased so much of late by the combination of all people concerned in the receipt of money, and so industriously promoted by the enemies of the Government, that all pieces were so far diminished and debased, that five pounds in silver specie was scarce worth forty shillings

* Parliamentary History, Vol. V. p. 955.

according to the standard, beside an infinite deal of iron, brass, or copper, washed over or plated." The Committee made a report with several suggestions, which proved that their ideas upon the subject were very crude. This state of things called forth a multitude of pamphlets —one of them, evidently on authority, contained some very extraordinary results.* After entering into a calculation to ascertain the quantity of silver coin in circulation, it concluded that the whole of the silver money, clipped and unclipped, hoarded and current, then was £5,600,000. Of this, four millions consisted of clipped money, and the remainder was unclipped and hoarded, or current in the remoter countries. To shew the extreme state of the degradation of the coinage it states, that in the three months of May, June, and July, 1695, 572 bags of silver coin, each containing £100, were brought into the Mint, which, according to the standard, should have weighed 18,451 lbs. 6oz. 16 dwts. 8 grs., whereas they actually did weigh 9,480 lbs. 11 oz. 5 dwts., making a deficiency of 8,970lbs. 7 oz. 11 dwts. 8 grs., which shewed that the current silver coins were depreciated in the proportion of 10 to 22. Under this state of things, the British coinage, which would only sell for bullion in foreign countries, and consequently would only pass for its intrinsic worth, fell 25 per cent. in the foreign market, or the Exchange appeared to be 25 per cent. against England. At the same time the price of silver rose to 6s. 3d. in the market.

49. On the opening of a new Parliament, in November 1695, the King, in his speech, particularly called the attention of the House of Commons to the state of the coinage, and desired them to provide a remedy. On the 1st of that month Mr. Montague

* Parliamentary History, Vol. V., p. 969.

(afterwards Lord Halifax) had been appointed Chancellor of the Exchequer. The House, in acknowledgment of the paragraph in the King's speech respecting the ill state of the coinage, appointed a Committee to consider of a fund to make good the deficiency of the clipped money. Mr. Montague brought before the House the question whether it was necessary or expedient to re-coin the silver money? The country party, in the hopes of embarrassing the Government, held the negative. The Chancellor of the Exchequer replied that the mischief would be fatal if not remedied; and, among other things, said, that by reason of the ill state of the coin the foreign Exchange was infinitely to the nation's prejudice, and that that was the unhappy cause that the guineas advanced to thirty shillings, and foreign gold in proportion. It was carried by a majority of sixty that the silver should be re-coined.*

50. The question of the re-coinage having been carried, the next point debated was whether the several denominations of the new money should have the same weight and fineness as the old? This question produced many debates: those who were for raising the standard argued that the price of an ounce of silver bullion was advanced to 6s. 3d., and therefore the standard ought to be raised to an equality; that the raising the standard would prevent the exportation of the coin and the melting it down, and would encourage people to bring in their plate and bullion into the Mint.† The Government replied that such ideas were delusive, and that the only worth the coinage had in the eyes of foreigners consisted in its weight and fineness, and that all money between subjects of different Governments was of no greater value than so many pieces of uncoined bullion. That the

* Life of Lord Halifax, p. 31. † *Ibid.*, p. 33.

alteration of the standard would be perfectly useless as regarded foreigners, because, in selling their goods to this country, or in exchanging their money, whatever denomination we gave our money, they would only regard the weight and fineness of the money they received in exchange. That at home, if the standard were raised, every creditor would be defrauded of a large part of his debts; that it was a mere delusion to suppose that they could buy so much with the coin raised above the standard as before, because sellers would immediately raise the price of all their goods in proportion to the new standard, just as all commodities had been raised in price when guineas were passing for thirty shillings. That, with respect to the argument of the price of bullion having risen to 6s. 3d., and that therefore the standard of the silver coin ought to be raised likewise, that *it was impossible that the price of silver could rise and fall in respect to itself.* That it was as clear as any mathematical demonstration could make it, that an ounce of silver would ever be worth another ounce of the same fineness, and no more, allowing some inconsiderable disparity upon the account of the coin, if one ounce be in money and the other in bullion. That it was certainly true that people commonly gave 6s. 3d. for an ounce of bullion, but that they gave only clipped pieces that had no more than the sound of shillings and pence, but were by no means the things themselves, that is, they were not the standard shillings of due weight and fineness, and were no more so in the just sense of the word than an ell is an ell when the third part of it is cut off. That the case was so plain, that when they demanded of those who affirmed an ounce of bullion to be worth 6s. 3d., whether they meant six milled shillings and threepence, they knew not what to reply. *But this alteration of the value of bullion*

was merely in relation to diminished money. That it was matter of fact that with 5*s.* 2*d. of new milled money they could buy an ounce of bullion, while those who paid it with clipped pieces paid* 6*s.* 3*d.* The Chancellor of the Exchequer concluded by moving a resolution, that in coining the new money the House would not depart from the ancient standard either in weight or fineness. The unanswerable arguments of the Government prevailed and the resolution was carried, and it was determined to adhere to the existing standard.*

51. It having been determined to re-coin the money and to adhere to the existing standard of weight and fineness, the next question was, who was to bear the loss consequent upon such an operation, the holders of the degraded coin, or the public? It was decided properly in this case that the expense should be borne by the public, because as the degraded state of the coinage was due to the want of care on the part of the Government, it would have been hard to have thrown the entire loss on the individuals who held it. A fund of £1,200,000, to be raised by various taxes, was settled for that purpose.†

52. The effect of all these measures was that guineas were at length brought to be current for the same sum as they had been before the great disarrangement of the coinage. They were restored to their former value of 21s. 6d. and remained so until the year 1717, when another alteration in the market value of gold and silver began to be sensibly felt. The want of adjustment

* Parliamentary History. Vol. V., p. 970.—Life of Lord Halifax. P. 33.

† Fuller details than would be suitable to our plan to give of the extreme degradation of the coinage, will be found in Anderson's History of Commerce, Ruding's Annals of the Coinage, and Leake's Historical Account of English Money.

between the rating of the gold and silver coins compared with the market value of the two metals, immediately made itself felt in the way we have previously noticed, and as it always will do under similar circumstances, the disappearance from circulation of the metal which is underrated. At this time it was silver that was underrated, and it was exported in such quantities as to cause a severe scarcity of silver coin. On the 19th Dec., 1717, the subject was brought before the House of Commons by Mr. Aislabie, the Chancellor of the Exchequer. He said* the great scarcity of the silver specie was in all probability occasioned by the exportation of the same, and the importation of gold, and proposed that a speedy remedy should be put to the growing evil by lowering the value of the gold specie. Mr. Caswall seconded the motion of Mr. Aislabie, and after discussing the various values which gold and silver coins had borne with respect to each other, argued that it was the over valuation of the gold which had occasioned the exportation of great quantities of silver specie. This had given rise to a great foreign trade, which consisted in importing gold into this country in exchange for silver, and the gold being coined produced a profit of nearly 15 pence on each guinea. Nothing could be clearer or sounder than this argument. If persons can buy a greater quantity of gold abroad with silver than they can here, they of course will export their silver, and *vice versâ* if persons abroad can buy more silver here than they can in their own country with the same quantity of gold, they will certainly send their gold here to buy up all the silver they can, and if the state of the law be persisted in which degraded silver below its real value, it can end in only one way, viz., by the total disappearance of silver from circulation.

53. The increasing magnitude of the evil had al-

* Parl. Hist. Vol. VII. p. 523.

ready occupied the attention of the government, and they had, on the 12th of August previously, desired Sir Isaac Newton, the Master of the Mint, to investigate the subject generally and to report to them upon it. He reported* that by the market values of the two metals, the guinea was worth but so much silver as would make 20s.8d. instead of 21s. 6d. He shewed this necessarily caused an exportation of silver. He calculated the different comparative values of gold and silver in different countries of Europe, according to the Mint regulations of their coinage, and shewed that, owing to these, silver had a natural tendency to leave England and Spain, and flow into Sweden. He stated that in China and Japan, gold was only nine or ten times as valuable as silver, and in the East Indies about twelve times; and that this great cheapness of gold there, caused a drain of silver from all Europe, to the East. "And it appears by experience as well as by reason, that silver flows from those places where its value is lowest in proportion to gold, as from Spain to all Europe, and from all Europe to the East Indies, China, and Japan, and that gold is most plentiful in those places in which its value is highest in proportion to silver, as in Spain and England." He pointed out that it was the inequality in the valuation of these two metals, that caused so much transmission of one or the other from place to place, "and if gold were lowered only, so as to have the same proportion to the silver money in England, which it hath to silver in the rest of Europe, there would be no temptation to export silver rather than gold to any other part of Europe. And to compass this last, there seems nothing more requisite than to take off about 10d. or 12d. from the guinea, so that gold may bear the same proportion to the silver money in England, which it ought

* Parl. Hist. Vol. VII. p. 526.

to do by the course of trade and exchange in Europe; but if only 6d. were taken off at present, it would diminish the temptation to export or melt down the silver coin; and by the effects would shew hereafter better than can appear at present, what further reduction would be most convenient for the public." "If things be let alone till silver money be a little scarcer, the gold will fall of itself, for people are already backward to give silver for gold, and will in a little time, refuse to make payments in silver, without a premium, as they do in Spain; and this premium will be an abatement in the value of gold, and so the question is, whether gold shall be lowered by the Government, or let alone till it falls of itself by the want of silver money."

54. In conformity with this report, the House of Commons addressed the Crown to issue a proclamation to make guineas current at 21s. each, and so proportionably for any greater or less pieces of coined gold, which accordingly was done by proclamation, dated 22nd of December, 1717. Both Houses of Parliament passed resolutions that no alteration should be made in the standard of the gold and silver coin of the realm in fineness, weight, or denomination.

55. Considering that the true principle of a metallic currency had not yet been discovered, viz., to have but one standard of value, the next best thing was done to make the relative values of the coins as nearly as possible conformable to their market values, and this was the last change which the valuation of gold underwent, and in the language of the Mint, the Mint price of gold was then fixed at £3 17s. 10½d. per ounce. But from Sir Isaac Newton's own Report it appears that the full difference between the Mint and market values was not abolished, and the difference that was preserved has caused a

very remarkable change in the British currency, for whereas silver had been the standard coinage of the country, and gold had only been introduced as subsidiary to it, the great scarcity of silver during the last century, owing to the underrating of the silver, and the neglected state of the coinage, caused the merchants to prefer to discharge their Bills in gold, instead of silver, and this custom of paying in gold, and considering all contracts to be made in reference to gold, became so firmly established, that gold at length superseded silver as the standard currency of England, and silver was degraded to the same rank as copper, and is only used now for the purpose of coining tokens called shillings, half crowns, &c., to serve as a small change for sums below the gold unit.

56. Notwithstanding the repeated experience the government had received of the evils and inconvenience of allowing the currency to fall into a degraded state, they gathered little wisdom from it, and the coinage continued to deteriorate during the following reigns, till at the accession of George III., in 1760, it was in as bad a state as ever. The market price of bullion rose greatly above the Mint price, and the Foreign Exchanges fell, but nothing was done to remedy it. The state of the law left open one wide door of temptation to tamper with the coinage, though it was issued at full weight from the Mint, there was no care taken to preserve it at full weight,—there was no limit declared, which if it fell below, it should cease to be legal tender. The consequence was that a thin wafer of metal was as much legal tender as a full weighted coin. In former times when the clipping and wearing of the coin had proceeded to extreme lengths, certain temporary proclamations were issued, declaring coins below a certain weight not to be legal tender; but it is a remarkable circumstance that, ever since the invention of coining,

which was for the very purpose of certifying that there was a certain amount of metal in the coin, no state seems to have provided that, if from any circumstances the actual weight of the metal did not correspond to its certified amount, it should cease to be legal tender. From this negligence an extravagant idea got abroad, that the weight of the coin had no effect upon its value, and that it was the mere appearance of a certain piece of metal, or mere phantom, which was called a pound, that was efficacious in commerce.

57. Owing to the inattention paid to it, the coinage in 1771 had fallen into a most disgraceful and alarming state. The gold coins had never been so deficient; three fourths of the silver was base.* In this and the following year the Mint prosecutions for offences against the coin increased largely. In the next year an Act was passed (Statute 1773, c. 71) which, stating in the preamble that the preventing the currency of clipped and unlawfully diminished and counterfeit money was a more effectual means to preserve the coin of the kingdom entire and pure than the most rigorous laws for the punishment of such as diminish or counterfeit the same; and reciting that by the known laws of the kingdom no person ought to pay, or tender in payment, any counterfeit or unlawfully diminished money; and that all persons might not only refuse the same, but might and were required by law to destroy and deface the same, it was enacted that any person to whom such unlawfully diminished or counterfeit money should be tendered to deface or destroy it, and forbade it to be received in payment of Taxes.

58. A Committee of the whole House having taken the bad state of the gold coinage into consideration,

* Ruding's Annals of the Coinage, Vol. II., p. 83.

reported, on the 10th of May, 1774,* that a quantity of the gold coin, which had been received at the Bank at the Mint price to an amount of the nominal value of nearly three millions and a half, was deficient in weight upon an average 9 per cent.; that part of the gold coin in circulation which was coined before 1763 was deficient 5 per cent., and that what had been coined between 1763 and 1772 was deficient about $2\frac{1}{2}$ per cent.; that, while pieces of gold coin differing so greatly in weight were allowed to be current under the same denomination, and at the same rate and value, the new and perfect pieces would continue to be exported and melted down. To remedy this they proposed that all guineas weighing less than 5 dwts. 8 grs., and smaller coins in proportion, should be called in and re-coined. They also resolved, "That the only effectual method of preserving the gold coin from being unlawfully diminished, and of preventing the mischiefs to which the public is thereby exposed, is, that the said coin should be current by *weight* as well as by tale;" and, "That the most convenient method of making the gold coin so current, is, that every person who shall receive in payment any piece, or number of pieces, of such coin deficient in weight, shall be entitled to receive a compensation for the said deficiency from the person tendering the said coin," at a certain rate. They also proposed, "That for a limited time the silver coin of the kingdom be not allowed to be legal tender on the payment of any sum exceeding £50, but according to its value by weight after the rate of 5s. 2d. per ounce."

59. In pursuance of these resolutions an Act (Statute 1774. c. 42) was passed, by which it was enacted that no tender in the payment of money made in the silver coin of the realm for any sum exceeding £25 at

* Parliamentary History, Vol. XVII., p. 1327.

any one time should be legal tender for more than according to its value by weight at the rate of 5s. 2d. per ounce.

60. In 1797 the deficiency of the silver coinage was so great that it was attempted to be supplied by the issue of Spanish Dollars. Of these 2,325,099 were issued at 4s. 9d. each, they were stamped with the mark of the King's head, which were called in again in the course of the year; but the practice was resumed at various periods during the war. The increasing scarcity of specie as the war proceeded, produced by causes which will be considered hereafter, rendered it imperatively necessary to provide a coinage of a small denomination, to prevent private persons being obliged to do so; and in 1811 the Bank of England were permitted to strike and issue silver tokens to pass current for 5s. 6d., 3s., and 1s. 6d. Notwithstanding this, private tokens were obliged to be tolerated for a considerable time, and were not abolished till July 1813.

61. At length, peace being happily restored, the great work of a re-coinage was undertaken, in 1816, when the important principle was adopted of having only one standard of value. During the course of the preceding century, merchants had become accustomed to consider all contracts to be made in gold, and this was now declared to be the sole legal tender. At the end of the eighteenth century the relative values of gold and silver had perceptibly changed, consequently the adjustment which had been effected in 1717 no longer corresponded to the market value of the two metals; and if a silver coinage had been issued at the former denomination and weight, the very same effects would have followed which had so often been experienced before—it would immediately have disappeared from circulation.

In order to guard against this, the power of private persons having silver bullion coined was taken away, and the pound weight of silver was ordered to be coined into 66 shillings instead of 62; but of these 4 were kept back for the expenses of coinage, and consequently only 62 were issued; the result of which is, that the present shillings pass current for rather more than 6 cent. above their intrinsic value. In order to prevent any injustice to individuals from this depreciation of the coinage, it was enacted that no tender of payment in silver coin above 40s. at any one time should be legal, either by tale or by weight.

62. The Government have ever since that time kept the issue of silver in their own hands, and, by duly limiting its quantity, have completely succeeded in maintaining its current value above its intrinsic value, without affording too much temptation to forgery by the difference between the two.

63. The silver coinage having been thus finally settled, it was determined to abolish the inconvenient denomination at which the gold coin passed. We have already seen that when guineas were first issued they were intended to be of the value of 20s., and that it was owing to the error in rating them that they came to represent 21s. On the 1st of July, 1817, a new gold coin was made current by proclamation, of the value of 20s., which was ordered to be called a sovereign, in imitation of the coin of that name first issued by Henry VII. It was ordered to be the weight of 5 dwts., 3.274 grs. of standard gold; and soon afterwards the half sovereign, of proportionate weight, was made current. The last coinage of guineas took place in 1813. Since this last reformation in the coinage no alteration that requires notice has been introduced, except the striking of 2s. pieces

called Florins, with the avowed intention of introducing the decimal division into the currency; which, if we may judge by the usual *vis inertiæ* of this country in matters of greater advantage, may perhaps be effected about a century hence.

64. We have already observed that the invention of a representative for money was practised in very early times by the Carthaginians and Italians, we may also notice a passage in Sir John Maundeville's travels, which shows that both a leather and a paper currency were in general use, to the exclusion of almost any other, in China, in the 14th Century. He says,* speaking of the Emperor of Cathay, or China,—"This Emperour may dispenden als moche as he wile with outen estymacioun. For he despendethe not, ne makethe no Money, but of lether emprented, or of papyre. And of that Money is som of gretter prys, and som of lesse prys, aftre the dyversitie of his Statutes. And whan that Money hathe ronne so longe, that it begynnethe to waste, than men beren it to the Emperoures Tresorye, and than thei taken newe Money for the old. And that Money gothe thorghe out all the Contree, and thorghe out all his Provynces. For there and beyond hem thei make no Money nouther of Gold nor of Sylver. And therefore he may despende ynow and outrageously."

65. Great as was the depreciation of the English coinage from its original value, by the repeated diminution in weight it underwent from the successive Sovereigns, it was trifling compared with what took place in the neighbouring kingdoms of Scotland and France. In all three the pound weight was the original standard, but while in England the pound weight was originally coined into twenty shillings, and by successive reductions is now

* Travels of Sir John Maundeville, p. 239. Edit. 1839.

coined into 66 shillings, in Scotland it was coined into 144 shillings in 1475, into 192 shillings in 1529, into 260 shillings in 1556, into 360 shillings in 1565, into 440 shillings in 1579, into 480 shillings in 1581, into 600 shillings in 1597, and into 720 shillings in 1601. The pound Scots was thus reduced to $\frac{1}{36}$ part of its original weight, and is only of the value of 20d. English, and the Scotch shilling is 1d. English. In France, matters were even worse. The French *sou*, which is a corruption of *solidus*, and originally meant a shilling, as may be seen in the extract from the Mint Indenture of Edward I. already quoted, is now used to mean a halfpenny. The *livre*, in the last days of the old French monarchy, nearly corresponded to the modern *franc*, and the *denier*, which corresponded to the old British penny, was so infinitesimally small as to have ceased to exist.

66. We will conclude this chapter by noticing some of the variations in the comparative value of gold and silver in different ages. In the days of King Solomon, gold was so abundant that silver was taken no account of. (2 Chron. ix. 20). From profane authors, we find that Herodotus says gold was rated to silver as 13 to 1 at Babylon (III. 95). In the time of Plato it was 12 to 1; in that of Menander, the comic poet, as 10 to 1; at Rome, under the Republic, about 13 to 1; from the time of Julius Cæsar to Diocletian, 12 or 11 to 1; in that of Constantine it increased to 15 to 1; and under Theodosius to 18 to 1. It does not seem ever to have varied beyond these limits in more modern times, as the absurd estimation of it by the advisers of Edward VI. was clearly an error upon their part. Its present value is between 14 and 15 to 1, but if the supplies of it continue to be produced with the same abundance as they have been during the last five years, we may expect that an alteration will take place before long.

TABLE SHEWING THE DIFFERENT VALUES FOR WHICH THE POUND WEIGHT OF SILVER AND GOLD WERE ORDERED TO PASS CURRENT, BY VARIOUS MINT INDENTURES FROM 1344 TO 1817.

(From the Report of the Commissioners appointed to inquire into the Constitution, &c. of the Royal Mint. P. 35. 1849.)

Date A.D.	SILVER. Current Value of 1lb. or Mint Price. £	s.	d.	GOLD. Current Value of 1lb. or Mint Price. £	s.	d.
1344	1	2	2	15	0	0
1345	1	2	2	13	3	4
1346	1	2	4	13	3	4
1347	1	3	3 IN HALFPENCE			
	1	3	5 IN FARTHINGS			
1347	1	2	6 IN PENCE			
1350	1	3	3 IN HALFPENCE	14	0	0
1351	1	3	5 IN FARTHINGS			
1352						
13 indentures to	1	5	0	15	0	0
1402						
1412						
9 indentures to	1	10	0	16	13	4
1459						
1461	2	0	0	16	13	4
1464	1	17	6	20	16	8
1465						
12 indentures to	1	17	6	22	10	0
1509						
1526	2	5	0	27	0	0
				25	2	6
1533	2	5	0	25	2	6
1543	2	8	0	28	16	0
1547	...		...	30	0	0
1549	4	16	0	34	0	0
1550	...		...	28	16	0
1553	1	16	0	...		...
	2	0	0			

Date A.D.	SILVER. Current Value of 1lb or Mint Price. £	s.	d.	GOLD. Current Value of 1lb or Mint Price. £	s.	d.
1553						
6 indentures to	3	0	0	36	0	0
1572						
1577						
1582	3	0	3	36	1	$10\frac{1}{2}$
1583						
1593	...		...	33	0	0
1601	3	2	0	36	10	0
				33	10	0
1604	4	2	6	...		...
1605	...		...	40	10	0
1611	...		...	44	11	0
1612	3	2	0	44	10	0
				40	18	4
1617	3	2	0	40	18	4
1623	3	2	0	44	10	0
				41	0	0
1625	3	2	0	41	0	0
1626	3	5	6	44	0	0
1626	3	2	0	44	10	0
				41	0	0
1649	3	2	0	41	0	0
1660						
1670						
1688	3	2	0	44	10	0
1702						
1718 to	3	2	0	46	14	6
1817						
1817 Now in force.	3	6	0	46	14	6

CHAPTER IV.

UPON INTEREST AND DISCOUNT.

UPON THE NATURE OF INTEREST—CAUSES THAT DETERMINE ITS RATE—DIFFERENT RATES FOR DIFFERENT SECURITIES—DIFFERENCE BETWEEN INTEREST AND DISCOUNT—SIMPLE DISCOUNT—COMPOUND DISCOUNT.

NOTE.—ON THE THEORY OF BANKING PROFITS, OR THE MATHEMATICAL PRINCIPLES OF BANKING FINANCE.

1. When a man employs his own capital in trade it is perfectly clear that he is entitled to retain for his own use all the profits resulting from such operations, whether those profits be twenty per cent., one hundred per cent., or a thousand per cent. If any one of superior powers of invention were to employ his capital in producing a machine, which should be of great public utility, he might realise immense profits and accumulate a splendid fortune, and no one in the ordinary possession of their senses would grudge such a man any amount that he might legitimately make, or would think it inherently wicked of him to gain as much as he could; on the contrary, he would probably be applauded, he would be called a benefactor to his country, and his name would be handed down with honor to posterity.

2. It often happens, however, that persons endowed with such powers of mind and habits of industry as would tend to enrich themselves and benefit their country, are deficient in capital, or the means of setting their industry in motion; on the other hand, it often happens that persons who possess capital, or the latent power of setting these energies in motion, are deficient in the active qualities which are necessary to give it effect, or they may not have the necessity or inclination to do so. Under these circumstances it is manifestly advantageous to all parties, and the community in general, that those who have skill and industry without capital, and those who have capital without skill or energy, should meet together and combine their respective latent qualities; such a combination would produce a beneficial result, and it seems clear that each party should have the profits of the combined enterprise in some previously agreed proportion. Such operations are extremely common, and there are two methods usually adopted as to the sharing of the profits. The person who advances the capital may either agree to receive a certain definite proportion of the profits realised, or he may stipulate to receive a certain definite sum in proportion to the capital advanced. In the former case he agrees to share the risk of there being no profit at all, or he becomes a *partner*. In the latter case he restricts his share to a certain amount previously defined, however large the profits may be, but he endeavours to shield himself from any loss which may arise, and in this case the sum he receives as a reward or hire for the use of his capital is called INTEREST.

3. The price to be paid for the service rendered by the capitalist does seem to be entirely a subject for private arrangement between the parties, just as much as the price paid for any other service; nor does there appear to

the eye of common sense anything in the nature of things inherently wicked in any particular division of the profits they may agree upon between themselves. The service rendered by lending money in such cases may vary in intensity according to circumstances, just as any other service may vary. Nobody thinks it wicked for a man to make 1000 per cent. of his own capital if he can do so; nay, those who do so are frequently looked upon as the greatest benefactors to mankind. But if one person borrow capital from another, and give him a price for the service rendered, or a share of the profits in proportion to the capital advanced, it appears to some people to alter the whole nature of the transaction. While a return of 30 per cent. was quite an ordinary return in the way of trade for a man's own capital, they thought it something essentially wicked for the person who advanced the capital whereby these profits were made to take more than 5 per cent. for the use of it. The above is a simple explanation of the nature of interest; and there certainly seems no imaginable reason why such a contract should not be left to the private arrangement of the parties themselves as other contracts usually are. Yet there is no subject upon which men seem so utterly to have taken leave of their senses as on that of interest or usury; and it is not a little humiliating to think, that within the last twenty-three years it was a crime punishable by law to take more than 5 per cent. for the use of money in any case whatever, and that the usury laws were only partially relaxed then, and were not finally abolished till 1854.

4. Supposing, however, the rate of interest to be free and unfettered, as it now is, it is very easy to see the considerations which will govern it. In the first place, as the interest is always a part of the profits realized, it is clear that the first element which will determine it will

be the expected rate of profit. The next is the proportion between capital and industry. If capital be very scarce, and those who want to borrow it numerous, they of course will naturally give a greater proportion of the profits to the capitalist; but if capital be abundant, and those who want to borrow it be fewer, the capitalist will have to be contented with a smaller proportion of the profits, and the rate of interest will fall. These considerations shew at once that interest conforms to the rule we have already established for prices, for the profits expected to be realized by means of the capital are the intensity of the service rendered; and the number of those who want to borrow compared to the quantity of capital to be lent represents the power of the buyer over the seller. Hence, interest varies directly as the profits, and inversely as the proportion of the supply to the demand, which, thrown into an arithmetical form, is:—

$$\text{Interest} = \frac{\text{Profits.}}{\frac{\text{Supply.}}{\text{Demand.}}}$$

$$\text{Or, Interest} = \frac{\text{Demand} \times \text{Profits.}}{\text{Supply.}}$$

5. The preceding considerations shew that the Interest of money is precisely analogous to the Rent paid by a farmer to a landlord. They are each of them paid out of the profits realized, and they are the hire paid by the borrower for the use of trading capital, and they generally bear some proportion to the profits, but what proportion that will be, is modified by particular circumstances in each case.

6. These considerations contain the general principles which govern interest under ordinary circumstances, but of course, in times of great commercial difficulty, both

general and particular sums are paid for the use of money very much higher than the usual rates, which are also called interest; but these are exceptional cases, and are paid, not out of the legitimate profits of business, but for some great exigency, as for the use of sums for a short time to stave off ruin, or other penalties which may attach to a trader for failing to meet his engagements. The sums paid in such abnormal instances are not fairly to be called interest.

7. Let us consider a practical example, in order to put the matter in a clearer view. Every one who is acquainted with agriculture knows how profitable it is to drain and improve land. In many districts, draining land pays 30 per cent., that is, it will repay the whole sum laid out upon it in little more than three years.

8. Now let us suppose that a farmer has an improvable farm, and wants capital to improve it; he goes to a capitalist, and tells him that by laying out £1000 upon it he can increase the value of its produce to the amount of £300 a year. Now, if the capitalist and the farmer agree to combine in this operation, and agree that the extra produce obtained by that expenditure should be shared between them in certain proportions, why should any other person, or why should any law interfere to decide what that proportion should be? Why should it not be left to themselves to settle upon the price of this service rendered, just as the tailor and the customer agree between themselves upon the price of a coat, or anything else?

9. If the case were stated as above to any man of ordinary intelligence, and he were asked in what proportion the extra produce should be shared between the capitalist and the farmer, he might very naturally answer, that it would be fair to have it *equally* divided. Now, if we suppose the operation performed

and the produce actually obtained and shared equally between them, every one would commend so equitable a bargain. But suppose that instead of the produce being shared equally in kind, it were previously sold, and its value in money obtained, then it would appear that the capitalist received 15 per cent. for his money, and this, in the estimation of a very general prejudice, which flourished till very recent times, would alter the whole nature of the transaction, and the capitalist would be branded with very opprobrious epithets, and subject to severe punishment. Now all this folly arose from a misconception of the elementary principles of interest.

10. We are happily relieved from entering into any discussion of the Usury Laws by their being at length totally exterminated from our Statute Book. But we may be permitted to observe that the progress of just legislation on this subject must always be remarkable as an instance of the extraordinary *vis inertiæ* of an established law in this country, where no great popular passion is brought to bear on it, even where no great interests are enlisted in defending it, and where abstract justice and good sense are not made a popular cry. In the year 1691 Locke published his "Considerations of the Consequences of Lowering the Interest of Money," in which the futility of the Usury Laws was perfectly demonstrated. The letters of Bentham upon the "Defence of Usury" are as splendid examples of unanswerable argument as any in existence. The most eminent writers had pointed out, not only their utter futility to effect their purpose, but their highly mischievous effect in aggravating the evil they were intended to prevent. The experience of several commercial crises had demonstrated, that in consequence of the law attempting to prevent people paying more than 5 per cent. for the use of money, they often

had to pay 50, 60, or 70 per cent. by the methods they were forced to adopt. They were investigated and condemned by a Parliamentary Committee. Yet it was only in the year 1833 that the first breach was made in them by exempting Bills which had not more than three months to run from their operation, and by temporary extensions and prolongations, most other contracts were taken out of their operation, but it was only in 1854 that they were finally swept away from the Statute Book. Thus from the period of their total demolition in argument till their total demolition in fact, a space of no less than 163 years elapsed. If it took this period to abolish laws equal in absurdity to those of witchcraft, and which were felt and acknowledged to be an unmitigated nuisance by great numbers of the community, we may well believe that it will take 20 years* to introduce the decimal system of coinage, which might cause a little inconvenience to a few people for a week or so, but which would be an enormous saving of time to the whole commercial interest.

11. In the example we have taken of improving land, we have seen that the first expenditure of £1,000 would produce a return of thirty per cent. on the outlay, and therefore a profit of fifteen per cent. would be by no means an inequitable sum for the capitalist to receive. It would by no means follow that the outlay of another £1,000 would produce an equal profit, and in fact it would almost certainly not do so, consequently, the person who advanced a second £1,000 to be expended upon it, would not receive so large an amount of interest as the first, if the same rule were followed of sharing the profits equally, and with the expenditure of every successive £1,000, the profits would be less and less, till at last they would be inadequate to produce any appreciable return on the

* The opinion of Sir John Herschell—which seems too sanguine.

capital. In all these cases, however, the rate of interest paid for the use of the capital would be modified by the quantity of capital that was to be had, in comparison to the quantity of it which was wanted to be borrowed. From these circumstances we may see why the rate of interest will usually be much higher in a new country than in an old one; first, because the expenditure of a like sum of money will generally produce a greater profit in a new colony, than in the old country; and secondly, in a new country, the quantity of capital in it will be necessarily small, because the community has not had time to render those services to mankind, which are the only means by which they can accumulate capital. When an old country throws off a swarm of colonists, it is most generally caused by physical suffering at home. People do not generally desert their ancestral home, unless they find that their means of advancement are circumscribed, and that they can get no adequate reward for their industry. A new colony will therefore abound with energy and industry, but be deficient in capital, which will make a greater comparative demand for it, and necessarily raise its value, or the price paid for the use of it. In old and highly developed countries, interest will necessarily be low, because there will usually be a great store or accumulation of capital, the fruits of centuries of industry and parsimony, which is transmitted from generation to generation, and as few people wish to diminish their capital or property, there will be a considerable demand for investments by capitalists, and they will by their competition have to submit to lower interest. A consideration of these modifying circumstances will be found to be in exact accordance with the formula we established for prices in Chapter II.

12. These are the causes which permanently govern

the market rate of interest in different countries; but in the same country the market rates for different species of securities differ, and their rates vary from time to time according to circumstances; but yet they will all be found to be governed by one general rule.

13. In considering the question we have hitherto not admitted any idea of the danger of the security, but we have supposed the investment to be perfectly safe; and it is only the sum paid and received for the use of the money under a full sense of the security of the investment that should be strictly termed interest. But almost all investments are subject to more or less risk, and the sum received under the denomination of interest must include two elements, one the actual hire for the money, and the other as a premium of insurance on the risk, and just as this risk is greater so must the premium be higher. Interest will be found to be exactly analogous to rent or hire described in Chapter I. It was there seen that the rent or hire of any article comprised two elements, one the profits of the capital invested in it, the other to replace the deterioration or wear and tear of the article itself. Now, bad debts and losses in trade may be considered as the deterioration or wear and tear of capital. And the sum paid for the use of money in a particular employment must, in a similar way, comprehend one element for the simple profits, and the other sufficient to cover the usual losses and risks of that mode of investment. If one business is more hazardous than another, it is quite clear that no capitalist will lend his capital to that employment unless he receives in the long run enough, not only to give the profits of capital, but also to cover the losses and replace the wear and tear, or deterioration, of capital. Hence, the rate of interest will always rise in proportion to the risk of the security, and

hence there must always be in the same country, and at the same time, a different market rate of interest for every investment of a different degree of security, just as there is always a different rate of hire or rent for articles of different degrees of perishability. But these different rates will always rise and fall together.

14. We may look at the question in another light. Lending out money at interest may be regarded as the purchase of an annuity, to last for a longer or a shorter period, according to the agreement of the parties. Hence, in purchasing such an annuity, the price of it has to be considered just in the same way as the price of anything else. Now, it is quite evident that the value of the annuity must, in a great measure, depend upon its certainty of being paid, or upon its security; and, if there be one species of security more certain than another, it is quite clear that the former is a service of greater intensity than the latter, and must be paid for accordingly. Thus we may say, that a person who offers to take money at interest wants to sell an annuity to the lender of the money, and just in proportion as the security he can offer is good, so will he get a higher price for it; so that the interest of money paid by the borrower will be just in proportion to the risk run. Thus, money may be lent to merchants, to landowners, or to Government. Now, merchants are always subject to unforeseen disasters, not only from their own speculations, which may turn out unfortunate, but they are usually so involved with others that they are always liable to suffer from the faults or misfortunes of others; consequently there is always some risk in lending them money. The owner of land is exempt from many of the risks a merchant is exposed to: he is not generally involved with others in his business, but his prosperity is based upon the land itself, and, as long as

that is judiciously managed, it gives forth a sure increase, unless under the effect of some temporary dispensation of Providence; consequently the security for the payment of an annuity based upon the increase of the earth is far greater than one which is liable to the casualties of commerce. A considerably higher price therefore will generally be given for an annuity whose security depends upon land than upon commerce, that is, a landowner can usually borrow on cheaper terms than a trader. The Government of this country, again, is considered to be more secure than either land or commerce; consequently, by the same rule, an annuity purchased from the Government should usually cost more than either of the two former ones. And this exactly corresponds with the fact; the interest obtained by investing money in the funds is usually lower than what is obtained either from mortgage on land or on mercantile security.

15. We may, therefore, consider that the price paid for the use of the money always includes these two elements, one of which is the fair earnings of the money itself, and the other as the insurance to cover the risk of the loan to the lender. Each of these varies at different times, according to the particular person to whom the money is lent, and the total effect will vary accordingly, and it is sometimes not easy to discriminate the effects due to each separate cause.

16. These, then, are the circumstances which determine the relative market rates of interest on different species of security in any country, at the same time. If the rates of interest be observed at any particular time, the difference arises solely from the difference in the estimated safety of the species of security; and it will also be found, that if the rates in the same species of security vary, it is because there is more danger than usual in the par-

ticular security offered by an individual. Thus, in the species of security offered by Governments, which are usually called funds, the price of an annuity of £3 a year from the English Government, is seldom much under £100, while no one would give more than £30, or £35 for a similar one, from the dishonest and bankrupt Government of Spain. That is, the English Government can borrow money at little more than three per cent., while the Spanish Government can scarcely do so at nine. The same may be said in a greater or less degree of every one of the European Governments, and the prices of annuities to be paid by them, vary exactly in proportion to the supposed honesty or capacity of each to fulfil its agreement. It is universally true, that the value of the different kinds of annuities at the same time, and in the same market, will vary exactly in proportion of the estimated security of each; but this is by no means the case, if the observation be made at different times, because the value of money itself changes from time to time, like that of any other commodity, and accordingly the price paid for its use will vary according to that value, so that the interest received from the most secure species of investment at one time, may exceed that usually paid for the least secure species at another time, and this difference in value will be caused by an alteration in the relation of supply and demand, in accordance with the general principles that govern price. Thus, when commerce is stagnant, or there is a superabundance of money that cannot find employment, the competition for lending it increases, and the power of the borrower increases over each lender; on the other hand when commerce is active, there are more persons who wish to borrow, and of course the price will rise in proportion to the increase in the demand, and this will cause a rise in the market rate of all securities.

17. When this general change takes place in the market rate of interest, it by no means implies, that the securities are more dangerous at one period than another, but only that money itself has risen in value, and the different species of securities will preserve the same relative differences as before.

18. A fall in the rate of interest is so far from proving the safety of the security, that it will frequently be found to be worst when interest has been much depressed below the usual rate. Because when that happens, all sorts of wild schemes and speculations are set afloat, partly on account of the undue facility of obtaining capital, and partly because when interest is so much depressed, there are so many persons who live upon the interest of their money who become so distressed by the diminution of their incomes, they are tempted to embark in all sorts of hazardous schemes which promise a better profit. All the great commercial crises of late years have been preceded by a continued and unusual depression in the rate of interest, as we shall see more fully described in subsequent chapters of this work. On the other hand, when it rises much higher than usual, it puts a stop to a great deal of legitimate business in a manner that is very injurious to the country. It is clearly, then, most for the public advantage that the interest of money should neither be so low as to tempt persons to embark in dangerous speculations, nor so high as to impede real and useful industry.

19. The rate of interest in the whole market is affected by the alteration of the ratio of supply and demand. The whole class of seekers which constitute the demand is composed of a great many different branches, and if there be a great demand for money in one of these subdivisions, it will affect the rate in the whole

market. One of the most important, if not the most important, of these subdivisions is the demand for money for mercantile discounts, and an alteration in the ratio of supply and demand in this branch, always causes the most important effects in the whole market; but while we may say that an alteration in this ratio will produce these effects, we are not yet in a position to consider the causes that produce the alteration, until we fully understand the credit system, upon which our commerce so greatly depends, which will be treated of in the next chapter. We have seen that the rate depends very much on the most sensitive of all feelings—*confidence*, and it is clear that an Act of Parliament is as incompetent to regulate that as it would be to govern the changes in the barometer. We are however happily saved the trouble of demonstrating the unmitigated mischief of usury laws, by their recent abolition.

20. We have seen that interest is the price paid for the use of money advanced, and is intended to be part of the profits realized by the industry set in motion, and accordingly it is not paid until these profits have been realized. It often happens, however, that the lender requires the hire of the money to be paid at the time he advances it, and when this is done it is called DISCOUNT.

21. When Bankers advance money upon mercantile security, they invariably do it by way of discount. Thus, if a Banker discounts a Bill at twelve months for a customer at £5 per cent., he keeps back the £5 and hands over £95 to his customer, who pays him £100 at the end of twelve months. Many persons when they hear of £5 per cent. interest and £5 per cent. discount, think that there is no difference between them, whereas there is a very considerable difference in favor of the lender who advances money by way of discount

rather than by interest, and we must be more explicit on the point because we have not seen this difference correctly stated in any book.

22. As the customer only receives £95 and pays £5 for the use of it at the end of the year, it is clear that the interest he pays for the money he actually receives exceeds £5 per cent. in the proportion of 100 to 95. Making the calculation it will be found to be actually £5.2631578 . . . . . (1) per cent. We may call this *simple discount.*

23. But this is not the whole of the advantage he reaps. He retained £5 at the time of making the advance, and he may trade with that £5 just in the same way as he traded with the principal sum. Now £5 is 100 shillings, and if he advances that by way of discount, he will retain 5s. and make a profit of 5.2631578 . . . . s. (2) on the advance of 95 shillings. This fraction of a shilling will be found to be .2631578 . . . . of a £, and of course must be added to the previous profit.

24. In a similar way he may trade with the 5s., and it will be found that the profit on this will be 3.1578946d. (3) with a very small fraction over. This latter fraction is £0.0131578 . . . . and after this the fractions become so exceedingly minute that they may be neglected.

25. To ascertain correctly the whole profit made by the Bank, we must add (1) (2) and (3) together. Thus:—

£5.2631578
.2631578
.0131578
. . . . . .

5.540166 See Note p. 196.

Which is equal to £5 10s. 9½ .558 . . . d. per cent. This calculation clearly shows that the profits made by

way of banking discount exceed those by way of interest by more than 10 per cent. per annum.

26. Mr. Macculloch in his Commercial Dictionary states the profits of discount at 5 per cent. to be £5 5s. 3d., but he has omitted to take into account the profits due to the £5 which the Banker retained in his hand at the time of the advance.

27. The foregoing account of discount will not be found to agree with what is usually given in works on Algebra, but it is the method invariably used by Bankers. Bankers never use the method of discount which is given in the common books of Algebra, and it would be highly erroneous to calculate the profits of discount to a Banker by the usual algebraical formulæ. The fact is, that no algebraical writer seems to have understood the practice of mercantile discounts, and a completely new set of formulæ require to be framed, to calculate the profits correctly; moreover, we require a new name to be appropriated to Banking discounts. We have called it simple discount where the interest retained is not traded with, after the analogy of simple interest, and so we may appropriately call Banking Discount, where the discount is again discounted, Compound Discount after the analogy of compound interest. We shall thus have four different ways of calculating the profits of money, by simple and compound interest, and by simple and compound discount.

28. It is easily seen how very much more profitable it is to advance money by way of discount than by interest, because if the loan be for a year, compound interest, or interest upon interest, cannot commence until the end of the second year, or until the expiration of the second interval of time when interest becomes due; but compound discount commences immediately the loan is made.

NOTE TO CHAP. IV.

ON THE THEORY OF BANKING PROFITS; OR, THE MATHEMATICAL PRINCIPLES OF BANKING FINANCE.

1. No writer on Algebra, that we are aware of, has investigated the formulæ which shew the profits which are made by the method of discounting as practised by Bankers. We have observed in this chapter, that the discount given in most Algebraical works is not the one which Bankers employ, and therefore the formulæ given in them are inapplicable to Banking operations. We have, therefore, thought it might be interesting to describe the method actually adopted, and to investigate the formulæ which result from those methods, and to compare them with those for simple and compound interest. We shall see that we shall be able to arrive at a few formulæ which will enable us to calculate the profits of any operation in Banking, or of any system of Banking.

Profits arising out of the loan of money may be either by way of *Interest* or *Discount*.

When they are made by way of *Interest*, the whole sum agreed to be lent is advanced, and the hire of it is not paid until the end of a certain definite interval, as a year.

When they are made by way of *Discount*, the profits are calculated at the rate agreed upon, and that sum is deducted from the amount advanced.

Thus, if a banker lends his customer £100 for a year at 5 per cent. interest he advances him £100, and the customer returns the £100 at the end of the year with the £5 as profit.

If the banker *discounts* a bill for £100 for a year, at 5 per cent., he deducts the £5, and only advances £95 to his customer, who pays him £100 at the end of the year.

Hence, for the actual advance of £95 the banker receives £5 profits, which clearly exceeds £5 per cent. interest.

Such an operation may be called Simple Discount; and we must now investigate a formula to find the actual profit made by the banker by this operation.

2. *To find the amount of a given sum in any time at Simple Discount.*

Let $P =$ Principal sum in £

$r =$ interest of £1 for 1 year.

$D =$ discount on P.

$m =$ number of years.

$M =$ amount of Principal and Discount.

Then $rP =$ interest on P£ for one year.

And $P - rP =$ sum actually advanced $= P(1-r)$.

Let $r^1 =$ interest on each £ actually advanced.

Then $$\frac{r^1}{r} = \frac{P}{P(1-r)} = \frac{1}{1-r}$$

$$\therefore r^1 = \frac{r}{1-r}$$

Now $$D = r^1 P = P\frac{r}{1-r}$$

$$M = P + D = P\left(1+\frac{r}{1-r}\right)$$

In m years we have,

$$D = P\frac{mr}{1-r} \quad \ldots \quad \ldots \quad \ldots \quad \ldots \quad (\alpha)$$

And $$M = P + D$$

$$= P\left(1 + \frac{mr}{1-r}\right) \ldots \quad \ldots \quad (\beta)$$

And these two equations will enable us to solve any question on the subject; and if any three of the quantities be given, the fourth may be found by the solution of a simple equation.

3. The banker having retained the profits at the time of making the advance is enabled to trade with them at once in a similar manner. The profits of the first principal sum will form a second principal, which he may advance by way of discount, and the profits of the second principal may be similarly traded with, and form a third principal, and so on for an infinite number of times. When the profits are so traded with, each time, until they become infinitesimally small, it may be called Compound Discount.

4. *To find the amount of a given sum in any time, at Compound Discount.*

Using the same notation as before.

It is clear that the amount M will consist of the sum of two infinite series—one series of the sums advanced by way of principal at each operation, and the other of the profits due to each operation.

Thus, if P be the principal sum,

Then $P—rP$, or $P(1—r)$ is the sum actually advanced,

And $P\frac{r}{1—r}$ is the profit on P by way of discount.

Therefore $P\ (1—r) + P\frac{r}{1—r}$ is the first term.

$$= P\left(1—r + \frac{r}{1—r}\right) \quad \ldots\ldots\ldots\ldots\ldots\ldots\ (1)$$

Now, as the amount of the simple interest rP is retained, and forms a new principal sum, which is traded with in the same way as the original principal, it is evident that that the interest on rP £ at r is r^2P,

And $rP—r^2P$, or $rP(1—r)$ is the sum actually advanced,

And $rP\frac{r}{1—r}$ is the discount due to it.

Therefore, $rP\left(1—r+\frac{r}{1—r}\right)$ is the second term ..... (2)

Similarly, $r^2P\left(1—r+\frac{r}{1—r}\right)$ is the third term ..... (3)

&c. &c.

And $r^{n-1}P\left(1—r+\frac{r}{1—r}\right)$ is the n^{th} term ..... (n)

Adding these n equations together we have,

$$M = P\left(1—r + \frac{r}{1—r}\right)\left(1 + r + r^2 + r^3 + r^4 + \&c.\ldots\ r^{n-1}\right)\ldots(a)$$

Let Σ denote the sum of the geometrical progression,

$$1 + r + r^2 + r^3 + \&c. \ldots\ldots + r^{n-1}$$

$$\text{Then } \Sigma = \frac{1—r^n}{1—r}$$

And (a) becomes,

$$M = P\left(1—r+\frac{r}{1—r}\right)\left(\frac{1—r^n}{1—r}\right)$$

Now, as r is a proper fraction r^n diminishes as n increases; and the series has a finite limit.

Let $n = \infty$; then $r^n = 0$

And $$M = P\left(1 + \frac{r}{(1-r)^2}\right)$$

Which formula gives the amount of P£ at compound discount at rate r for one year.

If the operation be continued for m years,

$$M = P\left(1 + \frac{r}{(1-r)^2}\right)^m$$

Let $R = 1 + \frac{r}{(1-r)^2}$, or the sum of £1 and its compound discount for one year.

Then $$M = P\,R^m$$

If D be the sum received by way of discount,

$$D = M - P = (R^m - 1)\,P$$

and, by means of these equations, any one of these quantities may be expressed in terms of the others.

Thus $$P = \frac{M}{R^m}$$

And $$m = \frac{\log. M - \log. P}{\log. R.}$$

5. The formulæ for the calculation of Simple and Compound Interest are given in any ordinary work on Algebra; we shall, therefore, assume them as known; and we may now compare the different formulæ which shew the Profits by way of Simple Interest and Discount, and Compound Interest and Discount.

We have,

At Simple Interest $M = P\,(1 + mr)$

..... Discount $M = P\left(1 + \frac{mr}{1-r}\right)$

At Compound Interest $M = P\,(1 + r)^m$

..... Discount $M = P\left(1 + \frac{r}{(1-r)^2}\right)^m$

These four formulæ will enable us to calculate the profits upon any financial operation in banking.

6. We are also able to deduce formulæ for comparing the difference in profit, at the end of a year, produced by trading with money in these different ways.

Let r be the rate at Interest

r^{I} ..... Simple Discount

r^{II}..... Compound Discount

Then $r^{\mathrm{I}} = \frac{1}{1-r} r$ (1)

$r^{\mathrm{II}} = \frac{1}{(1-r)^2} r$ (2)

And $r^{\mathrm{II}} = \frac{r^{\mathrm{I}}}{1-r}$ (3)

Which equations shew the relation between the Interest, and Simple or Compound Discount, on any sum for a year, so that one may always be deduced from either of the others. Hence also we see that the Profits by way of Interest, Simple Discount, and Compound Discount are in Geometrical Progression, the common difference being $\frac{1}{1-r}$

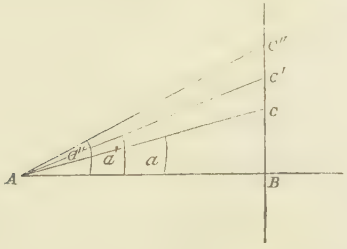
7. In consequence of the difference in profit in trading by these various methods being connected by these relations, we may exhibit them by either of the following figures :—

Thus, let AB be any given quantity.

BC the amount of interest.

BC^{I} the amount of simple discount.

BC^{II} the amount of compound discount.



Then $r = \frac{BC}{AB}$; $r^{\mathrm{I}} = \frac{BC^{\mathrm{I}}}{AB}$; $r^{\mathrm{II}} = \frac{BC^{\mathrm{II}}}{AB}$.

$r = \mathrm{Tan.}\ \alpha$, $r^{\mathrm{I}} = \mathrm{Tan.}\ \alpha^{\mathrm{I}}$, $r^{\mathrm{II}} = \mathrm{Tan.}\ \alpha^{\mathrm{II}}$

$\therefore \alpha = \mathrm{Tan.}^{-1} r$

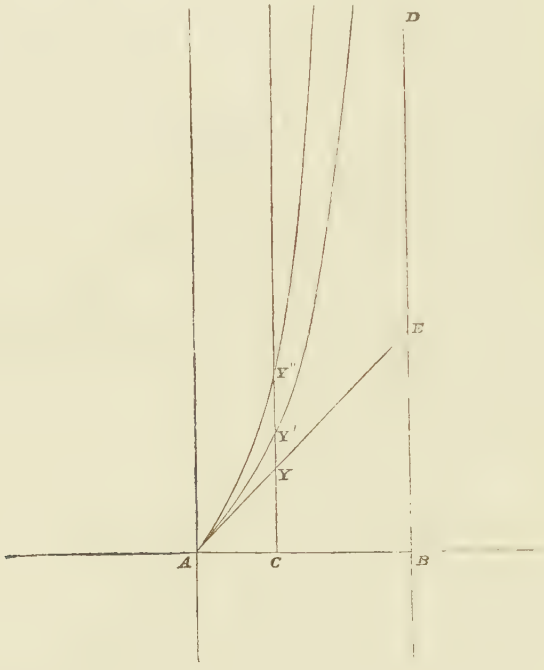
$\alpha^{\mathrm{I}} = \mathrm{Tan.}^{-1} r^{\mathrm{I}} = \mathrm{Tan.}^{-1} \frac{r}{1-r}$

$\alpha^{\mathrm{II}} = \mathrm{Tan.}^{-1} r^{\mathrm{II}} = \mathrm{Tan.}^{-1} \frac{r}{(1-r)^2}$

So that if either of these quantities be given on the line BC, a portion of it, representing the others, may be determined.

8. We may represent this in another way.

To find the equations to the curves representing the profits made by way of Interest, and Simple and Compound Discount.



Let A be the origin.

Let A B be any given line $= a$

Let A C be any quantity less than A B $= x$

Let $y =$ profits.

1. For interest we have in all cases,

$$y = x$$

The equation to a straight line passing through the origin at an angle of 45

2. For simple discount we have from § 6 (1)

$$y = \frac{1}{1-r}\, x$$

Here $\frac{x}{a} = r$

$$\therefore\ y = \frac{1}{1-\frac{x}{a}}\, x$$

$$= \frac{ax}{a-x} \quad \ldots\ldots\ldots \quad (1)$$

The equation to an *Hyperbola.*

3. For compound discount, we have from § 6 (2)

$$y = \frac{1}{(1-r)^2}\, x$$

$$= \frac{1}{\left(1-\frac{x}{a}\right)^2}\, x$$

$$= \frac{a^2 x}{(a-x)^2} \quad \ldots\ldots\ldots \quad (2)$$

The equation to a curve of the third order.

In each of these equations (1) and (2), it is evident that

when $x = 0$ $\quad y = 0$

when $x = a$ $\quad y = \infty$ as it should be.

And $x = a$ is an asymptote to the curves, and the only branches of the curves which are applicable to our present purpose are those lying between the origin A and the asymptote at B.

Hence, if we trace these curves, and for any sum x which is less than a, draw the ordinate CY intersecting the three curves, it will exhibit the comparative profits of each mode of trading.

The above equations give the profits for only one year, but it is easy to extend them so as to represent the profits for m years. Thus for the profits at Simple Interest for m years, we have $y = mx$, the equation to a straight line passing through the origin at an angle whose tangent is m. The equation to the curve for Simple Discount will still be one to an Hyperbola; but as the equation for Compound Discount involves the $2m^{th}$ power of x, the equation will represent a curve of the $(2m+1)^{th}$ order.

9. The formulæ we have found enable us to calculate the following table, which shows the difference in profits made by way of interest, or simple, and compound discount, at the same rate, for one year :—

[It is evident that if it be only taken for one year, and compound interest be calculated by the year, there is no difference between simple and compound interest.]

INTEREST.	SIMPLE DISCOUNT.	COMPOUND DISCOUNT.	INTEREST.	SIMPLE DISCOUNT.	COMPOUND DISCOUNT.
1	1.010101	1.020304	7	7.526881	8.093421
1¼	1.265822	1.281845	7¼	7.816711	8.427721
1½	1.522832	1.546000	7½	8.108108	8.765522
1¾	1.781170	1.812700	7¾	8.401084	9.106866
2	2.040816	2.082465	8	8.695652	9.451795
2¼	2.301790	2.354772	8¼	8.990735	9.798077
2½	2.564102	2.628823	8½	9.311475	10.176475
2¾	2.827763	2.907725	8¾	9.589041	10.508539
3	3.092783	3.188435	9	9.890109	10.868252
3¼	3.359173	3.472013	9¼	10.192837	11.231787
3½	3.626943	3.758490	9½	10.496132	11.597826
3¾	3.896100	4.047894	9¾	10.803323	11.959362
4	4.166666	4.340277	10	11.111111	12.345679
4¼	4.438642	4.635657	15	18.823529	22.145328
4½	4.701570	4.923110	20	25.000000	31.250000
4¾	4.986873	5.235562	30	42.857142	61.224489
5	5.263157	5.540166	40	66.666666	111.111111
5¼	5.540897	5.847912	50	100.000000	200.000000
5½	5.820105	6.158842	60	150.000000	375.000000
5¾	6.100795	6.472992	70	233.000000	777.777777
6	6.382968	6.790391	80	400.000000	2000.000000
6¼	6.666666	7.111111	90	900.000000	9000.000000
6½	6.951871	7.435156	100	∞	∞^2
6¾	7.238605	7.762580			

The interpretation of this table is as simple as possible. Thus, if the profits of a loan at 6 per cent. be made by way of *Interest*, they will amount to 6 per cent. at the end of the year. If they be made by way of *Simple Discount*, that is, if they be laid by till the end of the year,

they will amount to £6·382968 per cent.; but if these profits be traded with, they will at the end of the year amount to £6·790391 per cent.

We may take a simple example to illustrate this Table. Thus if a money lender discounts a Bill for £100 at 50 per cent., he retains £50 and advances only £50. So that for the actual advance of only £50 he gains £50 profit, which is 100 per cent. Having retained the £50 from the first transaction, he may repeat the operation, and if he does so, he will clearly gain a profit of 200 per cent. Both these results which are evidently true, are deduced in the table from our formula.

When the rate of discount is 100 we observe that the profits are set down on the table as infinite, the meaning of which is very obvious; for if the rate were 100, the lender would advance nothing, and his profits would be £100, or infinitely great compared to the advance, at simple discount, and by the meaning of compound discount he might repeat the operation an infinite number of times. On referring to the figure § 8, we see that this result corresponds with what we have already obtained, because when the rate is 100, $x=a$ and we have seen that in that case the ordinate representing the profits becomes an Asymptote to the curves for simple and compound discount, exactly as it should be.

10. We may now employ these formulæ to the determination of several examples.

To find in what time a sum of money will double itself at Simple and Compound Discount.

1. For Simple Discount

$$\text{we have } M = P\left(1 + \frac{mr}{1-r}\right)$$

$$\text{Let } M = 2P$$

$$\therefore\ P = P\,\frac{mr}{1-r}$$

$$\text{or } m = \frac{1-r}{r}$$

$$\text{Let } r = 5 \text{ per cent., or } \tfrac{1}{20}$$

$$\therefore\ m = \frac{1-\frac{1}{20}}{\frac{1}{20}} = 19 \text{ years.}$$

And similarly the time for any other rate may be found.

2. For Compound Discount

$$\text{we have } M = P R^m$$

$$\text{Let } M = 2P$$

$$\therefore \quad 2 = R^m$$

$$\therefore \quad m = \frac{\text{Log. } 2}{\text{Log. } R}$$

$$= \frac{\text{Log. } 2}{\text{Log. } \left(1 + \frac{r}{(1-r)^2}\right)}$$

Let $r = 5$ per cent. $= \frac{1}{20}$

$$\therefore \quad m = \frac{\text{Log. } 2}{\text{Log. } \left(1 + \frac{\frac{1}{20}}{\left(\frac{19}{20}\right)^2}\right)} = \frac{\text{Log. } 2}{\text{Log. } \left(1 + \frac{20}{361}\right)}$$

$$= \frac{\text{Log. } 2}{\text{Log. } \left(1 + \frac{20}{361}\right)}$$

$$= \frac{\text{Log. } 2}{\text{Log. } 1{\cdot}0554}$$

$$= \frac{{\cdot}3010300}{{\cdot}0234171}$$

$$= 12{\cdot}854708 \quad \text{years.}$$

Hence a sum of money will double itself at 5 per cent.

at Simple Interest in 20 years

„ Discount in 19 years

at Compound Interest in 14·206699 years

„ Discount in 12·854708 years.

These figures shew what a much more powerful method of accumulating money compound discount is than compound interest.

11. *If a Bank has deposits to the amount of* £100,000 *upon which it allows its customers interest at the rate of* 5 *per cent. per annum, and discounts twelve months bills to the same amount at* 7 *per cent., what is the difference, or profit per cent.?*

Referring to the table in § 9, we see that

Profits at 7 per cent. compound discount = 8 093421

Hence the profit = 3·093421 per cent.

12. *To find whether it is most advantageous to discount long or short bills at simple and compound discount.*

Let the *long* bills be for one year, the *short* bills for $\frac{1}{m}$th part of a year.

Then the expression for simple discount becomes

$$M = P\left(1 + \frac{mr}{m(1-r)}\right) = P\left(1 + \frac{r}{1-r}\right)$$

the same as the expression for one year; hence we see that it makes no difference whether the bills be long or short dated at simple discount; thus corresponding to simple interest.

The expression for compound discount will be

$$M = P\left(1 + \frac{r}{m(1-r)^2}\right)^m$$

EXAMPLE.—*What is the difference in profit at the end of the year between discounting one bill for* £1,000 *at twelve months, or discounting four bills of* £1,000 *at three months in succession, at 5 per cent. compound discount?*

For one bill of £1,000, at twelve months, we have

$$M = 1000\ (1 + \cdot 055401)$$
$$= 1000\ (1 \cdot 0554)$$
$$\therefore M = £1055\ 8s. \text{ very nearly.}$$

For four bills of £1,000 at three months, we have

$$M = 1000\left(1 + \frac{\cdot 055401662}{4}\right)^4$$
$$= 1000\ (1 \cdot 013850415)^4$$
$$= 1000\ (1.056560) \text{ by logarithms.}$$
$$\therefore M = £1,056\ 11s.\ 2\tfrac{1}{4}d. \text{ very nearly.}$$

Hence the difference in profit in favor of short bills at 3 months instead of at 12 months is £1 3s. $2\frac{1}{4}$d. per £1,000 very nearly.

For one month bills we have

$$M = 1000\left(1 + \frac{\cdot 055401662}{12}\right)^{12}$$
$$= 1000\ (1 \cdot 0046168)^{12}$$
$$= 1000\ (1 \cdot 05682) \text{ by logarithms}$$
$$\therefore M = £1,056\ 16s.\ 4\tfrac{3}{4}d. \text{ very nearly.}$$

For two month bills we have

$$M = 1000\ \left(1 + \frac{\cdot 055401662}{6}\right)^6$$
$$= 1000\ (1\cdot 009233)^6$$
$$= 1000\ (1\cdot 05669) \text{ by logarithms}$$
$$\therefore M = £1,056\ 13s.\ 9\tfrac{1}{2}d. \text{ very nearly.}$$

For three month bills we have as above

$$M = £1,056\ 11s.\ 2\tfrac{1}{4}d.$$

For four month bills we have

$$M = 1000\ \left(1 + \frac{\cdot 055401662}{3}\right)^3$$
$$= 1000\ (1\cdot 0184672)^3$$
$$= 1000\ (1\cdot 05644) \text{ by logarithms}$$
$$\therefore M = £1,056\ 8s.\ 9\tfrac{1}{2}d. \text{ very nearly.}$$

These results show that Compound Discount is analagous to Compound Interest, and that the more frequently the intervals recur at which the operations are repeated the more profitable it is.

13. *A banker charges his customers* r *per cent. Discount on three month Bills, at what rate should he charge four month bills, that the profits on each may be equal at the end of the year?*

We have by the general formula for three months' bills:

$$M = P\left(1 + \frac{r}{4(1-r)^2}\right)^4 \quad . \quad . \quad . \quad (1)$$

Let r^1 be the rate at which he should charge four months' bills.

Then the general expression becomes

$$M = P\left(1 + \frac{r^1}{3(1-r^1)^2}\right)^3 \quad . \quad . \quad . \quad . \quad (2)$$

And since, by the terms of the problem, (1) and (2) are equal, we have

$$\left(1 + \frac{r^1}{3(1-r^1)^2}\right)^3 = \left(1 + \frac{r}{4(1-r)^2}\right)^4$$

$$\therefore \quad 1 + \frac{r^1}{3(1-r^1)^2} = \sqrt[3]{\left(1 + \frac{r}{4(1-r)^2}\right)^4} = R \text{ suppose}$$

$$\therefore \quad \frac{r^1}{3(1-r^1)^2} = R-1$$

$$\therefore \quad (1-r^1)^2 = \frac{r^1}{3(R-1)}$$

$$\therefore \quad 1-2r^1+r^{1^2} = \frac{r^1}{3(R-1)}$$

$$\therefore \quad r^{1^2}-\left(2+\frac{1}{3(R-1)}\right)r^1 = -1$$

$$\text{Let} \quad 2+\frac{1}{3(R-1)} = R^1$$

$$\therefore \quad \left(r^1-\frac{R^1}{2}\right)^2 = \left(\frac{R^1}{2}\right)^2-1$$

$$\therefore \quad r^1 = \frac{R^1}{2} \pm \sqrt{\left(\frac{R^1}{2}\right)^2-1}$$

$$\therefore \quad r^1 = 1+\frac{1}{6(R-1)} \pm \sqrt{\left(1+\frac{1}{6(R-1)}\right)^2-1}$$

$$r^1 = 1+\frac{1}{6\left(\sqrt[3]{\left(1+\frac{r}{4(1-r)^2}\right)^4}-1\right)} \pm \sqrt{\left(1+\frac{1}{6\left(\sqrt[3]{\left(1+\frac{r}{4(1-r)^2}\right)^4}-1\right)}\right)^2-1}$$

14. *A bill broker charges his customers* 1s. *in the pound for discounting three month Bills; what are his profits per cent. at the end of the year?*

If he charges 1s. per pound for three months, it is clear that it is at the rate of 20 per cent. per annum, which is making profits by discount at 20 per cent. per annum on three month bills.

Now profits at 20 per cent. per annum compound discount = 31·25 per cent. by table Art. 9.

And by Art 12, if these be made at intervals of three months we have

$$\begin{aligned} M &= 100\left(1+\frac{\cdot 3125\ldots}{4}\right)^4 \\ &= 100\,(1\cdot 07812)^4 \\ &= 100\,(1\cdot 3511) \text{ by logarithms} \end{aligned}$$

Therefore total profit = 35·11 per cent.

The above examples are sufficient to illustrate the practical application of the formulæ we have obtained.

CHAPTER V.

UPON THE THEORY OF CREDIT.

ORIGIN OF THE SYSTEM OF CREDIT—BILLS OF EXCHANGE—PROMISSORY NOTES—DESCRIPTION OF THE OPERATION OF THE CREDIT SYSTEM—INFLUENCE OF A BANK IN THE SYSTEM OF CREDIT—ACCOMMODATION BILLS—DANGERS OF THE PRACTICE—IS CREDIT CAPITAL?—EXAMINATION OF THE OPINIONS OF SOME EMINENT BANKING AUTHORITIES UPON THE NATURE OF BILLS OF EXCHANGE AND PROMISSORY NOTES.

1. The operations of buying and selling, which we considered in the first two chapters, represented a contract which did not involve any ideas of *time* in it, but only of value, and the currency which we supposed to pass between the parties represented a debt, which took effect immediately, and simultaneously with the transaction it arose from. It often happened, however, that transactions of great benefit to society could not be performed from the scarcity of the currency, which could not always be procured in sufficient quantities by those who were willing to undertake these operations, and yet when they were done they would repay the original outlay upon them, together with a large revenue and profit. Advancing refinement, then, perceived the advantage that

might be gained by contriving a currency which should be evidence of a debt, but which should not be demandable at the time the transaction took place, but at some fixed period after it had occurred, when it might be completed, and produce a revenue to discharge the debt, when it should be agreed to be paid. This is called the system of CREDIT.

2. Such a system as this could only obtain among persons who had confidence in each other's honesty, good faith, and ability to fulfil their contracts, when they became payable. No man would render a service to another man, and promise not to demand any equivalent in return for three months or longer, unless he was well assured that the person who received the service would be able and willing to repay it at the time promised, or that, if he failed to do so, the law would speedily give him redress. It is evident that the basis of such a system is *confidence*, and it is impossible for it to prevail in any place where the people are not known for their general honesty and integrity.

3. The operation may be described as follows. A manufacturer, A, knowing the trustworthy character of his neighbour B, a retail dealer, advances him goods, and instead of requiring immediate payment for them, which may be inconvenient to B, he takes such an obligation from him as was described in chap. I., sect. 4, only that instead of being payable on demand, A agrees with B that he will not require payment until a certain time has elapsed, during which B may reasonably expect to sell them, and receive the money for them from his customers. He must, however, have the evidence of the debt, and the time when it is to be paid. This obligation may be expressed in two ways. 1st. It may be an order addressed by A to B requiring him to pay a certain sum of money

at a certain time from the date specified in the order, to A, or to any person he may name. In this form it is called a BILL OF EXCHANGE. 2ndly. It may be expressed as a promise emanating directly from B, in the form of a promise by B to A, to pay him or any person he may name, a certain sum of money at a fixed date. In this form it is called a PROMISSORY NOTE.

4. A Bill of Exchange is usually in the following form.

£120 10*s.* 4*d.* *London, May 4th*, 1855.

Three months after date pay to me (or A B), or order, the sum of one hundred and twenty pounds ten shillings and four pence, for value received.

To Mr. Timothy Gibbons,
Linendraper,
Cheapside, London.

John Stiles.

John Stiles is called the *drawer*, and Timothy Gibbons the *drawee*. The Drawer then presents the Bill to the Drawee to obtain his promise to pay the money at the date specified; and if he promises to do so he is said to *accept* the Bill, and he is then called the *acceptor*.

5. Formerly any assent that the Drawee gave to the Bill was a sufficient acceptance, and might either be by parol, or verbally, or by any collateral writing, but since 1821, the law, (1 & 2 Geo. IV., c. 78) enacts that "no acceptance of any inland Bill of Exchange shall be sufficient to charge any person, unless such acceptance be in writing on such Bill, or if there be more than one part of such Bill, on one of the said parts." The acceptance is usually signified by writing the words "Accepted, Timothy Gibbons," across the face of the Bill. This act only applies to inland Bills, so that the acceptance of foreign Bills need not be in writing on the Bill, but any collateral expression of intention to pay the Bill when it

is due, as by letter referring to it, or verbally, is sufficient. If the drawer wishes to transfer his debt to a third party, he may insert the name of that person in the Bill instead of his own, and that person is then called the payee.

6. A promissory note is usually expressed thus.

£143 4*s.* 9*d.* *London, May 4th,* 1855.

Three months after date I promise to pay John Stiles, or order, the sum of one hundred and forty three pounds four shillings and ninepence, for value received.

Timothy Gibbons.

In this case Timothy Gibbons is called the *maker* of the note, and John Stiles the *payee.*

7. The above form of words, though most generally used, are by no means essential for their respective purposes. Any form of words addressed by one person to another, requiring him to pay a given sum of money on a certain day, to any certain person, is a Bill of Exchange; and any form of words addressed by one person to another, conveying a distinct promise to pay a sum of money on a certain day is a Promissory Note. Many instruments have been worded so obscurely as to render it a matter of great difficulty to decide whether they are Bills of Exchange or Promissory Notes, and in such a case the holder, or legal owner of the obligation, may treat it as either one or the other; nor is it necessary to have the words "for value received" on either, though they are generally inserted.

8. This obligation therefore is evidence of A having rendered B a service, but stipulates that B is not to be called upon to repay the service until the time mentioned on the face of the obligation has expired, and in this respect differs from the obligation described in Chap. I. If B is a person in good repute, and is known to be possessed of

means so as to be able to pay the money when the Bill arrives at maturity, such an obligation is capable of passing from hand to hand, exactly in the same way as the one previously described.

9. Now A may be a manufacturer, and require cash to pay his workmen's wages every week, and such a Bill is unsuitable for that purpose, so he takes it to his banker, whose business it is to deal in money, and requests him to advance him the money. If the banker is satisfied of the integrity and capacity of the acceptor to fulfil his obligation when it becomes payable, he will buy the Bill from A. Before doing so, however, he requires A to write his name on the back of the Bill, the effect of which is that if B does not fulfil his obligation when it becomes payable, A undertakes to do so for him. In this case A is said to *indorse* the Bill, and the bank, or person, to whom he indorses it, is called the *Indorsee*. The effect of the whole transaction is, that the Banker buys the Bill from A with a warranty of payment from the indorser, and then he becomes the owner of the Bill, or more technically, is said to be the *Holder* of the Bill, and when it becomes payable demands payment of it on his own account, and not on account of, or as agent for A, to whom the original debt was due; and if the acceptor makes default in payment, the holder may sue him in his own name. In purchasing the Bill the banker calculates the interest, at the rate agreed upon, and retains it from the amount of the Bill, and only advances the difference. This method we have already described as being called *Discount*, so the banker is usually said to *discount* the Bill.

10. The multitude of operations transacted by Bills of Exchange, and Promissory Notes, have given rise to a great variety of nice distinctions, and subtle legal points, which is far too extensive a subject to be minutely detailed

here. There are several excellent treatises appropriated to this branch of Commercial Law, among which Byles on Bills of Exchange may be chiefly commended for its brevity and clearness. But there are certain general principles which occur in daily practice, and which every one who has anything to do with Bills and Notes should be familiar with, and these are collected at the end of this work.

11. In the operations effected by the system of credit, there is a certain tacit assumption taken as the basis of the contract by all the parties to it, which it may be well to consider. If we examine the contract we shall see that it is of this nature; that B promises at the end of a certain number of units of time, to pay to the holder of the bill, a certain number of the units of coined money; and it is tacitly assumed that each of these units of time and money, shall be uniform and invariable in amount and value, during the period in which the bill has to run. The very basis of the contract is, that B can purchase with the goods the same quantity of the currency, during the whole time the bill has to run, and that he shall have a certain well-ascertained time to perform the purchase in. The units of time expressed in the contract are usually either days or months, whose duration is well ascertained before hand, and from the fact of their being so, this element of the contract is apt to escape observation. If, however, the time in the contract were to be expressed in *hours*, and these hours were to be regulated by a clock, which was constantly altering its rate of going, so that nobody could tell at the end of three months, whether the hours pointed out by the hands, were really and truly of the same length, at the end of the contract as at the beginning, the speculation would be one of a very hazardous nature. Suppose that the con-

tract was to pay the money at the end of 2,160 hours, and if the clock by which the hours were measured, had so accelerated its rate of going, that at the end of that time, the hours indicated by the hands had dwindled away to forty minutes, B might very justly say that that was not the contract he had entered into. Now in a Bill of Exchange, the element of time is quite as essential as that of the money to be paid, and just as it is necessary that the units of time should be of a well-defined length, so ought the money which the goods should purchase be as far as possible of uniform value, during the currency of the bill. If the currency of the bill were regulated by such a clock, common sense would shew, that every effort should be made to procure the best possible clock, which should preserve the most uniform rate of going. In a commercial country where the great majority of operations are carried on by the credit system, it is almost an equally great desideratum that the currency should alter its value as little as possible; so that the repeated units of time and money should preserve the greatest possible uniformity of value.

12. From these considerations, it is manifest, that if any legislative interference with the currency at all be desirable, its aim should be to maintain its uniformity in value as far as possible. The perfection of a currency would be to be as uniform in value as a chronometer is in time. Now, uniformity in value does not mean uniformity in quantity, but uniformity in the amount of services it can command, and consequently it should increase or diminish in exact proportion to the amount of operations it represented. Thus, in Scotland it was observed, that at certain periods of the year, the quantities of currency in circulation were subject to certain regular and well-defined fluctuations, because at certain periods of the year,

a greater amount of operations took place than at others, and the Scotch Banks were in the habit of increasing their issues, in proportion to their operations, and it was this very fluctuation in quantity, that preserved the uniformity in value, because the quantity of the currency in circulation always rose and fell in unison with the amount of operations; consequently, the same amount of currency represented the same amount of service. If the currency had been limited in quantity, it would have caused the most violent fluctuations in value.

13. It is for the general interest of the country that money should not stagnate, but should put in motion all the industry it is capable of doing. Many private persons are in no immediate want of the services that money can command, so that if it remained in their hands it would be dead and unprofitable. Moreover the actual quantity in the possession of each individual may be comparatively small, but if these sums be collected from a great many individuals in a Bank, like a multitude of runlets trickling into a great reservoir, it will have a large sum at its command, and will be easily able to find profitable employment for it, because persons who want capital to carry on commercial operations, know where to obtain the requisite amount.

14. The functions of a Bank, then, in the commercial body resemble those of the heart in the human body. It attracts to itself capital, the life blood of commerce, from every direction, in the minutest rills, and having accumulated it in a great reservoir, propels it through all the arteries and channels of commerce, vivifying and nourishing it, and spreading vigour and health through the whole commercial body.

15. A Bank which receives sums of money from individuals, repayable on demand or at certain agreed-upon

notice, is called a *Bank of Deposit.* If it employs either capital subscribed by its proprietors, or the deposits of its customers in discounting Bills, it is called a *Bank of Discount.* If a Bank merely receives deposits from its customers without trading with them, it clearly can make no profits, unless its depositors pay a small commission for the convenience they receive in the safe custody of their money, and keeping their accounts. Such Banks are only likely to be instituted for state purposes, and under the control of the government who do not require to make profits. Almost all commercial Banks which are maintained by their profits, employ their deposits in discounting Bills, and are therefore Banks of Discount. Now, as we have as yet only supposed them to employ their own capital and the deposits of their customers in discounting Bills, it is evident that their primary intention is only to re-distribute capital which is already in existence; to collect it from those who have no immediate use for it, and to lend it to those who can employ it profitably. A Bank of Deposit and Discount merely acts as an agent between persons who want to lend and those who want to borrow. In this view of the case it has been maintained by very respectable writers that the credit system is no increase of capital. Thus, Mr. Macculloch says:*—

"It is plain that to whatever extent the power of the borrower of a quantity of produce, or a sum of money to extend his business may be increased, that of the lender must be equally diminished. *The same portion of capital cannot be employed by two individuals at the same time.* If A transfers to B, he necessarily by so doing deprives himself of a power or capacity of production, which B acquires. It is most probable, indeed, that this capital will be more productively employed in the hands of B than A; for the fact of A

* Commercial Dictionary. Art. *Credit*, p. 467. *Edit.* 1854.

having lent it shows that he either had no means of employing it advantageously, or was disinclined to take the trouble; while the fact of B having borrowed it shews that he conceives he can advantageously employ it, or that he can invest it so as to make it yield an interest to the lender and a profit to himself. It is obvious, however, that except in so far as credit contributes in the way here mentioned, to bring capital into the possession of those who, it may be fairly presumed, will employ it most beneficially, *it conduces nothing to the increase of wealth.* * * * *

It is next to certain that the transaction will have been advantageous. But still it is essential to bear in mind that it will have been so, *not because credit is of itself a means of production, or because it can give birth to capital not already in existence,* but because, through its agency, capital finds its way into those channels in which it has the best chance of being profitably employed."

16. In agreement with these views, Mr. John Stuart Mill says:*—

"The functions of credit have been a subject of as much misunderstanding, and as much confusion of ideas, as any single topic in Political Economy. * * * * *

"As a specimen of the confused notions entertained respecting the nature of credit, we may advert to the exaggerated language so often used respecting its national importance. Credit has a great, but not, as many people seem to suppose, a magical power, *it cannot make something out of nothing.*† How often is an *extension of credit talked of as equivalent to a creation of capital, or as if credit actually were capital.* It seems strange that there should be any need to point out that credit being only permission to use the capital of another person, the means of production cannot be increased by it but only transferred. If the borrower's means of production and of employing labor are increased by the credit given him, the lender's are as much diminished. The *same* sum cannot be used as capital both by the owner, and also by the person to whom it is lent.

* Principles of Political Economy. Vol. II., B. III., ch. xi., p. 36, 2nd Edit.

† We shall see in a subsequent chapter, that Plutarch is at issue with Mr. Mill on this point.

17. The sentiment of both these writers is, that the same coin cannot serve two purposes at once; if a colloquial expression might be pardoned, they mean that a man cannot "eat his cake and have it." Much of what they say is true, if we consider only credit between private individuals, as where one person discounts the Bill of another. Thus, if A discounts a Bill for B, it is clear that the money is gone from A, and is employed by B, who alone can have the use of it. Such an operation between A and B, is merely a transference of capital from A to B, who can employ it more advantageously than A. When we come, however, to examine the operation of a Bank of Deposit and Discount, we shall see that these views require to be very considerably modified, and that such a Bank economises capital in such a way that we may truly affirm that it *creates* capital.

18. A Bank of Deposit receives coin from a customer, and enters the amount of it in figures to his credit. If he has dealings with another customer, and has to pay him money, it is usual for him to give an order to transfer the figures from his own to that other customer's credit. The form by which this was done used to be, that the banker gave his customer a deposit receipt for the amount left with him, which the customer could endorse and transfer to any one he pleased. Any other person, therefore, to whom the customer duly transferred this deposit receipt might demand payment for it, or might if he were also a customer of the bank, require the amount to be transferred to his own credit. The modern practice is somewhat different, when a customer opens an account at a bank, the banker gives him a cheque book, which is a book containing a number of blank acceptances, which the customer may fill up from time to time, in favour of any person he pleases. The banker undertakes

to pay these acceptances at sight, provided he has sufficient funds of his customer to meet them. The system of cheques is found to have many advantages in practice over that of deposit receipts, which we need not describe more fully here, and has, in London at least, entirely superseded the old method of deposit receipts, but it is essentially the same in principle. When one customer of a bank, then, has dealings with another, the transactions between them are usually settled by a mere transfer of figures from one account to another. In the great majority of such cases the actual coin which these figures represent never leaves the vaults of the bank. The greater the magnitude of the bank, the greater will be the number of transactions carried on, and debts settled by the simple transfer of figures from one account to another without the actual transference of the coin which might, to all intents and purposes, have been non-existent. In the case we have supposed of a simple Bank of Deposit, such operations evidently cause no increase of capital, because the actual coin which every transfer of figures represents is in the bank's cellars. But a very short experience shows that the number of operations in which the actual coin is demanded will bear a very small proportion to those effected by the mere transfer of figures, and though it is impossible to say what amount may be demanded on any particular day, it will be found that it will seldom exceed certain limits, consequently, if due care be taken to preserve an ample margin to this limit, the remaining quantity of coin may be lent out in promoting industry, and producing a profit to the bank. Now if the bank discounts a bill for the merchant, the money advanced to the merchant may be the very coin against which a depositor may draw a cheque in favour of another customer of the bank, who receives the cheque on the faith that the

banker can produce it if required. Hence the same identical coin may be actually advanced to one individual, and be the basis of credit upon which another operation is effected. This shows that there are two kinds of credit, one is the credit upon which a customer receives a cheque in immediate payment of a debt, and is satisfied by the simple placing of the figures it represents to his account, without requiring the actual production of the coin; the other credit is where the banker advances that coin to another customer for a short period, on the belief that he will not be called upon to restore it. We may call the first the credit the banker enjoys, the second the credit he grants, and it is quite evident that the second is partly supported by the first.

19. We may easily imagine this operation carried a step further. Suppose the merchant who has his Bill discounted by the banker, does not draw out the money but only has it placed to his credit, as is very frequently the case, for him to have the *power* of drawing against, we shall then have the same coin represented by two sets of figures in the bank books, one at the credit of the depositor, and the other at the credit of the merchant, hence it will be pledged to two different individuals at the same time. Now, if the merchant instead of drawing out the cash, has dealings with another customer of the bank, and pays him by a cheque on it, the transaction, as in the former instance, will be settled by a simple transference of figures, without the abstraction of the coin from the bank, hence in this instance also the coin will perform the functions of a currency without leaving the bank's vaults, and we see that credit in this case generates and multiplies credit.

20. Now such cases as we have described, must be of daily occurrence in any large Bank, and we see that it

is unquestionably true, that this system has doubled the useful effect of the coin, it has made one sovereign do the duty of two; and hence, to that amount, it is to all intents and purposes a duplication of capital, which is equivalent in its practical effects to the creation of so much additional capital.

21. We may fairly assume that if the merchant, whose bill has been discounted, does not draw out the cash placed to his credit, the very same coin may serve as the basis upon which the Bank may discount a bill for a second merchant; and if so the same coin may be pledged to three different parties; and this may be repeated several times.

22. Such cases as these are so far from being imaginary, that they constitute the daily practice and experience of Banks; and the greater the Bank is, and the more numerous its customers, the more frequently *must* such cases occur. It would require so minute and intricate an investigation of the transactions of a Bank to discover the exact amount of increase of capital effected by such means as could scarcely be done; but we may safely say, that the greater the Bank is, the greater must be the increase of capital caused by its ordinary operations. Though any supposition on such a subject must be a mere guess, it would not, perhaps, be too much to hazard an opinion, that the practical effects of the deposits in a Bank of magnitude, may be doubled by such means.

23. The larger the Bank is, the more frequently must such cases as we have described happen, hence the larger it is, the more powerfully does it act as an engine for augmenting the useful effect of the currency, and the less amount of coin will it require to carry on any given amount of business. The same effect will be produced

on the general circulation, whether there be one Bank or many, for when there are several Banks in any locality, they usually meet at stated intervals to balance their mutual claims upon one another, and the difference only between these claims is paid in money. No doubt if there could be only one Bank to do the entire business, that amount of coin might be dispensed with, and the expence of maintaining one must be less than the expence of maintaining several establishments, but except in these particulars the effect upon the currency in general will be the same, whether there be several Banks or one; because the beneficial effects *are produced not by the number of Banks, but by the number of people who keep banking accounts.* Whatever, therefore, causes a greater number of people to keep banking accounts, or causes a more general diffusion of banking habits, tends to the benefit of a Bank, even though these persons should not keep their accounts at it. This proves that if a Bank cannot monopolize, or occupy the entire business of the district or country, it is an advantage to it that others should occupy the ground it does not hold; for these rivals in business mutually promote each other's power and influence in economizing coin.

24. We must now describe the credit system upon which so much of modern commerce depends, which, in its right use, is of incalculable advantage to a community, but the abuse of it has been the chief origin of those terrible mercantile catastrophes which have spread such desolation and ruin through the commercial world, some of which will be more particularly described hereafter.

25. We may define credit to be the temporary advance or creation of capital, to promote an operation which is expected to repay the capital employed in its

promotion, as well as certain profits, within a certain defined period.

26. To show how the system of discounting bills accelerates the motion of commerce, we may take a few examples. Goods or commodities pass through the following hands: First, the foreign importer or manufacturer; second, the wholesale dealer; third, the retail dealer; fourth, the consumer. To the first three of these parties the goods are *capital*, because they produce, import, or buy them for the purpose of selling them again, and making a profit from their sale. The fourth buys them for the sake of consumption. It is evident that the consumer or customer is the final cause of the goods being produced, and the price he pays for them must be sufficient to reimburse all the original expenses of production, together with the profits of the three preceding operations. It may, however, be a considerable time before the goods pass from the manufacturer to their final destination, the consumer, and the capital employed in their production and distribution replaced, so as to be the cause of producing other operations. Now it is quite evident that unless the first three classes have further capital to go on with until the consumer has bought and paid for the goods, their operations must come to a standstill for want of moving power until they are reimbursed. If, however, they can obtain a temporary advance of capital to enable them to go on until the proceeds of the first operation fall in, it is clear that they can go on producing without interruption, and supply a continuous stream of commodities.

27. As the price realized from the consumer must afford a profit to each person who renders a service in the production or distribution of the goods, it might be that, after a long course of successful business, they might each

accumulate sufficient capital to be able to continue their operations during the period before the return of the first outlay. This, however, can be but seldom the case; and however great their capital may be, they are always enabled greatly to extend their business by the system of temporary advances we have described.

28. The great function of a Bank of Discount is to supply these temporary advances of capital to the different parties, to enable them to carry on this continuous stream of operations, and on the payment of a small sum for the convenience and risk, to anticipate the receipt of the price from the consumer. The manufacturer who sells his goods on credit to the wholesale dealer, wants this temporary advance to carry on his works until he receives the price for them. He accordingly draws a bill on the wholesale dealer for the amount, and takes it to his banker, who discounts it for him.

29. Thus the manufacturer produces the goods and sells them on credit to the wholesale dealer; the wholesale dealer buys them on credit from the manufacturer, and sells them on credit to the retail dealer; the retail dealer buys them on credit from the wholesale dealer, and sells them for ready money if he can get it, from casual customers, or usually on credit to his regular customers.

30. These are the fewest number of hands that goods, in the ordinary course of business, will pass through; and it is clear that in their passage from the manufacturer to the customer, they will give rise to at least two bills of exchange—not unfrequently to three. Thus the manufacturer draws upon the wholesale dealer, who accepts to him. The wholesale dealer, who has already accepted one bill for them to the manufacturer, draws another bill for them on the retail dealer, who accepts to him; and not unfrequently, the retail dealer,

who has accepted to the wholesale dealer, draws upon his customer.

31 The manufacturer takes the bill accepted by the wholesale dealer to his banker, who discounts it for him; that is, he buys the debt due by the wholesale dealer, and with the capital thus advanced, the manufacturer may carry on his productions uninterruptedly. But the wholesale dealer has a banker as well, and he is in want of capital to continue his purchases, so he takes the bill he has drawn upon the retail dealer to his banker, who discounts it for him, that is, he buys the debt due by the retail dealer. Now the wholesale dealer is the principal debtor to the manufacturer's banker for the amount of the goods, and he is surety to his own banker in case of the failure of the retail dealer to meet his engagement. If the retail dealer draws bills on his customers for the goods, and can induce his banker to discount them, which we shall show hereafter is not a proper practice for a banker to do, he will be similarly liable on two different obligations for the same goods, as principal debtor to the wholesale dealer's banker, and in the second instance to his own.

32. The bills we have just described are all regular business bills, they represent real transactions, and they are what are called real bills, or Value Bills, and they are (except the last) what arise out of the regular and legitimate course of business, and are the great staple of what bankers purchase. It is a very prevalent belief among commercial men that business bills are essentially safe, because they are based upon real transactions, and always represent property, but the foregoing considerations will dispel at once a considerable amount of the security supposed to reside in commercial bills on that account, because we have seen that in the most legitimate course of business there will generally be two bills afloat representing any

given property, so that in the ordinary way there will be at least twice as many Bills afloat as there is property to represent them.

33. Now it is easy to suppose that the manufacturer, the wholesale dealer, and the retail dealer may all be customers of the same Bank, and if they all have their bills discounted by the Bank it may unknowingly advance money upon each of them, and so will advance on *bonâ fide* bills just three times the value of the property represented by them, and it is scarcely necessary to remark that in any large Bank two or more of these parties will often be its customers, and the Bank will make advances to two or more persons engaged in the same series of operations.

34. The above operations are only what arise in the ordinary course of business; it may sometimes happen that property may change hands much more frequently, and at every transfer a bill may be created. Hence, where the credits are very long and the transfers numerous, it is easy to imagine any number of bills being created which represent the same property. In times of speculation this is particularly the case. Now all these bills are technically commercial or real bills; but it is evidently a delusion to suppose there is any security whatever in them on that account. We may either consider that only one of them represents the property, and that the others represent nothing, or that each of them only represents such a fraction of the property as is denoted by the number of bills afloat. This was long ago pointed out by Mr. Thornton* who says, "In order to justify the supposition that a real bill, as it is called, represents actual property, there ought to be some power in the bill-holder to prevent the property which the bill represents from being turned to other purposes, than that of paying the bill in question.

* Enquiry into the Nature and Effects of Paper Credit. P. 30.

No such power exists; neither the man who holds the real bill, nor the man who discount it, has any property in the specific goods for which it was given." The above consideration shows that the real security of the bill consists in the general ability of the parties to it to meet their engagements, and not in any specific goods it is supposed to represent, the value of which is vague or illusory, and impossible to be ascertained by any one who holds or discounts it.

35. While the preceding sections shew that any given amount of property may be represented by a considerable number of *bonâ fide* bills, it is, on the other hand, very common for a bill to represent many times the amount of property expressed on the face of it. This is the case whenever the bill is endorsed and passed away for value, and the bill represents as many additional values expressed on the face of it as there are endorsements. A little reflection will make this so clear, that an explanation of it might almost seem superfluous. Thus, let us suppose a real transaction between A and B. A draws a bill upon B, who accepts it for value. A has dealings with C, and is indebted to C for value, in payment of which he tenders his bill upon B, and endorses it over to C. Thus the bill, by the time it is in C's hands, represents *two* transactions. C deals with D, and in payment endorses over the same bill to D; it then represents *three* transactions. And so it may be endorsed over from one party to another an unlimited number of times, and will denote as many transfers of property. When C endorsed over the bill to D, he merely assigned over to him the debt which A had previously transferred to him. Now, that might be done either by drawing a fresh bill on B, cancelling the first, or simply endorsing over the bill he received from A. Hence we see, that

every endorsement is equivalent to a fresh drawing; but if he draws a fresh bill it will represent nothing but B's debt to him, whereas, if he endorses over the bill he received it will represent B's debt to A, A's debt to C, and C's debt to D; and, consequently, it will be much more desirable for D to receive a bill which represents the sum of so many previous transactions, and for the payment of which so many parties are bound to the whole extent of their estates. Some time ago, almost the entire circulation of Lancashire consisted of bills of exchange, and they sometimes had as many as 150 endorsements upon them before they came to maturity. From this also we see, that no true estimate can be formed of the amount of bills of exchange in circulation by the returns from the Stamp-office, as has sometimes been attempted to be done, as every fresh endorsement is in effect a new bill. So that the useful effect of a bill of exchange is indicated by the number of endorsements upon it, supposing that every transference is accompanied by an endorsement, which is not always the case.

36. In the series of operations we have been considering the manufacturer is liable on only one obligation, and not even on that in the first instance, viz., as drawer of the bill on the wholesale dealer, and is only liable to pay on his default; but the wholesale dealer is liable on two obligations, his acceptance to the manufacturer, which he must at all events discharge, and, secondly, as drawer of the bill on the retail dealer, which he must discharge in the event of the latter failing to do so. Similarly, the retail dealer is liable twice over if he draws upon his customer.

37. Now, as the wholesale dealer is always liable for the goods in the first instance, and as he disposes of them probably to a considerable number of retail dealers,

and takes their acceptances and discounts them at his bankers, it must often happen, in the course of things, that some of these acceptances will be unpaid by the retail dealers, and he will be called upon to pay them. He must, consequently, to insure his own safety, always keep a sufficient amount of his capital either in funds at his bankers, or immediately available, to meet these contingencies, as, if he fails to meet even one of them, he is bankrupt in the strict mercantile meaning of the word; and, as we have seen, that the very essence of a bill is that it must be paid in cash at a fixed time, as the inexorable day approaches, if he has not cash sufficient he must sell his goods to get it, even at a sacrifice, to meet his own acceptances if his banker stops discounting for him.

38. Now, as even in the best of times the accidents of trade are numerous, it is the height of imprudence for any man to invest the whole of his available means in business and deal in credit obligations at the same time, because it will infallibly happen that he will be sometimes called upon to discharge obligations on the failure of others, and pay twice over for the same goods. Any man, therefore, who locks up all his available means in commodities, and does not keep a sufficient amount of cash ready at a moment's notice to meet these unforeseen contingencies, is *overtrading*, and the first mercantile convulsion in which credit is damaged and diminished will almost certainly ruin him.

39. Great and important, therefore, as are the advantages gained by the trader from the system of discounting bills, it must never be forgotten that they are liable to be attended with inconveniences of considerable magnitude; and that whoever sells goods upon credit, and takes a bill for them, and discounts it at his bankers, is always ex-

posed to the risk of having to refund the amount of the bill he sold to his banker, and this added to the loss of the payment of the goods themselves by the failure of his customer, may subject him to the diminution, or loss of his credit; consequently, unless he keeps a sufficient sum of money in hand, or immediately available, to meet these contingencies, he is overtrading, or trading beyond the due bounds of his capital.

40. We devoted considerable pains in the second chapter to shew that the price of articles at any given time depends entirely upon the ratio of demand and supply at that particular time. If the supply be excessive, nothing can prevent the price from falling to any state of depression, until it becomes absolutely unsaleable. The commodity, therefore, will not pay the cost of its production, and unless those concerned in producing it have independent capital to enable them to hold on until the excessive supply is taken off, and save them from selling when the price is ruinously depressed, or to stand the losses, they will all fail.

41. When we see that almost the entire commercial system of England is based upon this credit system, we see at once the enormous magnitude of the part that the banking system plays in it, which supplies so great a proportion of the moving power. And the combination of the principles maintained in the preceding chapters, with the comprehension of the way in which the banking system supplies this moving power, will furnish us with a very simple key to the solution of a question which has excited the warmest controversies among speakers and writers, viz., the effect of the issues of the Bank of England on prices.

42. In the simple and inartificial state of the currency before the introduction of banking, a very considerable in-

crease of the quantity of money, without a proportionate increase in the operations it represented, naturally and inevitably led to an increase in prices, because the act of buying and selling partook very much of the nature of barter, when an increase in the quantity of either commodity caused a certain diminution in its value, and more of it had to be given as an equivalent in exchange for any other article. When the Bank of England, under the old system, increased its issues very much, it was frequently observed that prices rose simultaneously, and it was often said that prices rose in exact proportion to the issues of the bank.

43. Such an opinion was evidently absurd, because the issues of the bank were not the whole currency, and if that opinion had been true, the rise could only have been proportional to the increment, as compared with the whole currency, and even if they had been the whole currency, it would have taken considerable intervals of time for these issues to have permeated the whole community so as to cause the increase of them to be sensibly felt in prices in general. When the precious metals received so great an augmentation in the beginning of the 16th century, it took several years for them to cause a general rise in prices. Notwithstanding the number of years that California and Australia have been sending out their enormous supplies of gold, there is not the least reason to suppose that they have as yet had any effect in raising prices, however it may be ultimately. It was not therefore by the increased quantity of notes to be exchanged directly for goods that caused the increase of prices. Few of the general public had the smallest idea of the amount of notes in circulation, and any change in prices produced in that method could only have been sensible after a long interval.

44. It was not, therefore, through their quantity compared directly with the quantity of goods, that any change in prices was caused, but through the indirect alteration caused by their means in the relation between demand and supply. While credit was high, and the bank discounted freely, the wheels of commerce were kept in brisk motion, and it was this activity of demand that kept up the prices. If credit, however, received a shock, the bank contracted its issues, and refused to discount, that is, to advance to traders upon credit. Consequently, as there were but few of them who were not under obligations which they were totally unable to meet without these advances, but which they were obliged to meet under the penalty of ruin, they were obliged to throw their commodities on the market, and sell them at all hazards, the supply of them, therefore, became excessive, and this inevitably depressed the price. Traders who had capital enough of their own to meet their engagements without discounting, were able to keep their commodities back from the market until, the extra supply being exhausted, prices rose again, from the natural operation of the demand. This fall in the price taking place coincidently with a contraction of discounts, was supposed to be caused directly by the diminished amount of currency compared to commodities, which was a great mistake, as it was in reality caused by the alteration in the ratio of demand and supply in the market.

45. We see then how utterly impossible it is to ascertain the precise effect of the contraction of the bank issues upon prices, because the change was determined by the quantity of produce which a refusal to discount compelled the holders of it to throw upon the market and the demand for it. If, therefore, the holders of one commodity were possessed of much independent capital, and

were not compelled to realize, to meet their engagements, a contraction of issues would not affect them much; on the other hand, if the holders of another commodity were in general men who depended chiefly upon credit, and were compelled to sell at a sacrifice to meet their engagements, a sudden refusal to discount for them would cause an extraordinary quantity of that article to be thrown on the market, and would cause a considerable depression in its price, which would be determined by the change in the ratio of supply and demand.

46. It was maintained by Mr. Turner,* that in a mixed currency, consisting partly of the precious metals and partly of paper representing them, that prices were artificial—that is, that commodities only bore the prices they passed for, through the general confidence or credit of the community, and that if every person insisted upon receiving coined bullion for his commodity, that it would be impossible that commodities should sell at the same nominal price; and that when precious metals and paper circulate together, although one may be constantly exchangeable for the other, yet that every article is measured by a standard bearing a higher nominal value than it would be possible to obtain if the precious metals were the real measure. Mr. Turner has left one consideration out of view, which will shew that it does not necessarily follow that if a paper currency had never existed, commodities would bear a less nominal price than they do now; because, by the extension of the circulating medium caused by the introduction of a paper currency, a very much greater amount of operations may be carried on than on a metallic basis. If the confidence in the paper

* Letter to Sir R. Peel on the Resumption of Cash Payments by the Bank of England, in 1819; by S. Turner, Esq., F.R.S., a Director of the Bank. P. 17.

currency is complete, it will support exactly the same amount of operations, and be in all respects equivalent to an equal amount of metallic currency. Hence, when a paper currency is added to a metallic currency, if it generates an amount of operations proportionate to its increase, it will cause no change whatever in prices, because the proportion between currency and operations will remain the same. If, however, this increased amount of circulating medium did *not* generate a proportionate increase of operations, then Mr. Turner's view would be quite accurate, and the nominal prices of commodities would be augmented in the same way as if an increase took place in the precious metals. And this was the chief reason why prices increased so much in the sixteenth century, from the importation of gold and silver from America. The Spaniards were a lethargic and indolent race, and they thought that the mere fact of having more gold and silver in the country augmented their wealth, without proportionably increasing their industry; whereas, the total effect was that there was more gold and silver plate and ornaments in the country, and prices rose enormously, but that was no increase of wealth. The country was not one whit richer than before, except by the possession of an additional quantity of gold and silver plate, but the precious metals diminished in value. But if the same circumstances had happened in a commercial and industrious nation like England or Holland, the probability is that that increase of the circulating medium would have been employed in developing a thousand useful works, and have given birth to a proportionate increase of industry, which would have caused no increase in prices, but a very great increase of national wealth.

47. But if, under such an extension of commercial operations produced by the confidence reposed in the

paper currency, that confidence receives a sudden shock, so that credit is destroyed, and a considerable amount of the paper currency is suddenly extinguished, before there has been time to reduce operations proportionably, it is quite clear that the metallic basis will have a much greater burden to bear, or have to represent a much greater amount of operations than before, and its value will proportionably rise. There will, consequently, be a much greater and more earnest demand for money than before; and those who require to have it, to support their credit and meet their engagements, will have to pay a very much higher price for its use; and just as the general community have been depending on credit and carrying on operations upon its support, so in proportion as that is extinguished, will the price of the use of money rise, until confidence is restored, and people are willing to return to credit, or have diminished their operations in proportion to the diminished currency.

48. It is this sudden failure of confidence and extinction of credit, which produces what is called in commercial language a "pressure on the money market," and which causes money to be "tight." When money is said to be scarce it does not mean, that there is a smaller quantity of money actually in existence than before, there may be more or there may be less—no one can tell what the amount of money in existence is; but a great amount of credit which served as a substitute, and was an equivalent for money is extinguished, and the money is called upon suddenly to fill the void. When a new field of commercial adventure is discovered by sagacious discerners, or a new market is suddenly thrown open by a change in the commercial policy of foreign nations, the first adventurers usually reap immense profits; as soon as this becomes generally known, a multitude of other specu-

lators rush into the same field, excited by the profits reaped by the first. Numbers of merchants and traders purchase commodities on credit, that is, they incur obligations which they must discharge at a future day, in the hopes that their returns will come in before the day of payment. But the immense quantity of goods poured in, usually gluts the market in a short time, and from the excess of supply prices tumble down, often to nothing, so that the goods become unsaleable, and either no returns at all come in, or such as are quite inadequate to meet the outlay. When this occurs it is called *overtrading*, and when this has been extensively practised, it is necessarily and inevitably followed by a great destruction of credit, and a great demand for *cash*. Those traders who have not received the returns they counted upon, to meet their engagements must raise money on any terms, and perhaps sell what property they have at any sacrifice, to save themselves from ruin. The effect of this will be, that money for which there is an intense demand will rise greatly in value, and the rate of interest or price of its use will increase; but as a necessary concomitant of such a state of things, a great quantity of goods will be thrown upon the market, and their price will be enormously depressed. These circumstances will, therefore, produce a very high rate of interest, and ruinously low prices, which must continue until the excessive supply of goods is exhausted, and confidence revived. In such crises as these, traders who have not sufficient capital of their own to meet their engagements, and hold on their goods until prices rise will infallibly be ruined. Under such circumstance the rate of interest bears no relation whatever to the rate of profit. The use of ready money to persons who have overtraded, is of infinitely more consequence than the price they pay for it; it may be well worth their

while to pay 15 or 20, or even 50 per cent. for the use of money for a temporary emergency, which may save them from ruin, and enable them to maintain their position.

49. It is, therefore, not the scarcity of money, but the extinction of confidence, which produces a pressure on the money market; and an examination of all the great commercial crises in this country will shew that they have always been preceded and produced by a destruction of this credit, which has usually been brought about by extravagant overtrading and wild speculation, as we shall have occasion to see hereafter.

50. The principle which we were at considerable pains to establish in the second chapter, that the relation between supply and demand is the sole regulator of value, combined with the action of the credit system we have just been considering, will explain all the phenomena witnessed during a pressure on the money market. The failure of credit in any one branch of business will produce its full effect on the general market-rate of interest, because that is regulated by the ratio of the demand for money from whatever quarter it comes. But it will not necessarily follow that the market prices of all commodities will be depressed. The market price for each commodity will be governed entirely by its own peculiar circumstances. If the holders of one commodity have independent capital, and have prudently abstained from overtrading, the price of such a commodity will not suffer much, because the ratio of supply and demand will not be altered, though it cannot avoid sympathising to a certain extent with other commodities; but if the holders of another species of commodity have overtraded and depended too much on credit, without sufficient means, they will necessarily be obliged to throw a great quantity of their produce on the market to realise, and this

excessive supply will depress the price. And this effect will be increased, because such are the very times when persons who have ready money are particularly cautious in buying, partly because they always hope the market will fall still lower, and they hope to buy cheaper when prices have fallen to a minimum, and they will certainly not buy more of any commodity than they can help which is diminishing in value; and partly because they must keep their ready money by them to maintain their own position. From these causes, not only is the supply increased, but the demand is diminished, so that the fall is doubly aggravated. Thus we see at once, that a falling market will always be well supplied, because people who must sell hasten to do so before the price falls still lower, and buyers hold aloof, waiting as long as they can, to see the lowest. On the other hand, when markets are rising, the case is reversed. The sellers hold aloof, hoping the price will still be higher; and buyers crowd in, hastening to purchase before the price rises more. When a market is desponding and inactive, the great method of imparting activity to it is to persuade people that things have reached the lowest, and are on the turn. It is evident that these considerations and oscillations apply to home produce, or at least to produce which is already in this country, and which can be thrown on the market immediately. In order to attract foreign produce the market must rise high for a considerable time, with the appearance of continuing so.

51. Leaving out of the question extravagant credit and overtrading, which are the abuses of credit, it will appear that the effects of a legitimate and proper use of credit is to equalise prices, and to make them more steady than they would be without it. If the manufacturer were to call for immediate payment of the goods from

the wholesale dealer, he would have to dispose of them quickly to realise the proceeds, and if the market were already overstocked, it would only produce a greater fall. On the other hand, if there were a great scarcity, and the price rose high, the manufacturer might not be able to produce quick enough to meet the favourable moment. But when the period of the credit is fixed and defined beforehand, the holder of the article may be more leisurely in his operations, and watch for a favorable opportunity to sell without being compelled to glut the market. It also causes the supply of commodities to be far more abundant, because, if there were no credit, none but persons of actual capital could invest money in purchases which would not bring in any return for some time. But, by the system of credit, persons of small means are enabled to start themselves in business, and by strict integrity and frugality may accumulate solid capital of their own.

52. The credit system we have been considering consisted of the advance of real capital for a short period; and though we have seen that a bank of deposit and discount does, by its ordinary mode of doing business, actually multiply the moving power, and therefore increase capital to a certain extent, its effect in doing so is undesigned, perhaps unforeseen, and, at all events, accidental and subordinate to its main object. Credit, however, may be purposely applied to the actual *creation* of capital for a short period, with a similar intention of being replaced by the profits arising from the operation it generates. It is often seen that an enterprise will be profitable and self-supporting if the means can be procured for setting it in motion. A loan of real capital will effect this; but, in default of real capital, credit may often be used as efficaciously for a short period to supply

the moving power required to start such an operation, and, having performed this temporary duty, be extinguished.

53. As an example of such a *creation* of capital, we may take such a case as this:—Suppose the corporation of a town wishes to build a market-hall, but has not the ready cash to pay for the materials, and builders' and workmen's wages. It may be a matter of perfect certainty, that if the market were once built the stalls in it would be taken up immediately, and the rents received for them would liquidate the debt incurred in erecting it. But as the workmen cannot wait till that period, but require immediate cash to purchase necessaries, it is clear that unless there is some method of providing ready payment they cannot be employed. In such a case as this the corporation might either borrow real capital from other parties, or, if they were in good credit, they might issue bonds for various amounts, bearing interest, payable at certain fixed dates. If these were made in sufficiently small sums, and if they were readily received by the dealers in the town, they might be used in the payment of the workmen's wages, and perform all the functions of a currency, and be equivalent to money. They would, therefore, be as efficacious as real capital. These bonds might be redeemable at different periods, and when the market-hall was finished, and the stalls let, the rents for them would gradually redeem, or pay off the debt, incurred for building it. It is said that more than one market-place has been built by adopting such a plan as this.

54. This is an instance of a temporary *creation* of capital, or an addition to the moving power of the community which represented no capital already in existence. The result to the corporation would be pre-

cisely the same, whether they accomplished their object by borrowing real capital and paying interest for it, or by issuing bonds, bearing interest, payable at fixed periods. In the one case, they would be liable to the full extent of their property to the persons from whom they had borrowed the money; in the other to those who held their bonds. If the operation was successful, its profits would in the first case pay the persons who had lent the money; in the second, the profits would pay the persons who held the notes, and extinguish the liability of the corporation. If the operation were unsuccessful, the corporation would equally have to make good the loss out of their general effects, either to the lenders of the money, or to the holders of the notes. It would, therefore, be a matter of no consequence whatever to the corporation which way they adopted to accomplish the work; but it would be a matter of importance to the town at large, because, if they borrowed real capital to do it, that would by so much diminish the fund of moving power applicable to other species of industry, and raise its price. It is clear, therefore, that the second method would be so much a clear addition to the capital of the community, and would therefore be most advantageous for them.

55. This second method of utilizing credit, from not being based upon *real* capital, is an instance of what is usually called *fictitious* capital, a name of extreme inaccuracy, which too many persons are in the habit of using, from the hasty assumption that what is not real must necessarily be fictitious, and are more led away by a jingling antithesis of words than an accurate perception of ideas. If the bonds issued by the corporation were not redeemable, and represented nothing, the epithet *fictitious* would be accurate. But such is far from being the case. In the first instance, the obligation incurred

by the corporation to the lenders of the money would not be limited to the specific capital they advanced, but would be a general charge on the whole property of the corporation; the bonds issued in the second case would be precisely the same, they would confer upon the holders of them a general charge upon all the property of the corporation. The security to the holders of the corporation's obligations would be absolutely identical in either case. If the corporation spend the money, it is absolutely gone away from them for ever, and is no more a security to the holders of their notes than if it had never existed. In either case, then, it is the permanent property of the corporation which is the real security of the holders of its notes; and they have the same general charge over it in both cases. It is, therefore, to the last degree inaccurate and untrue to distinguish one case by the term real capital, and to brand the other as fictitious. There is absolutely no distinction at all between the two cases, as far as regards the corporation and the holders of its obligations, the profits and the losses are identical in their effects in either case. The true difference is to the community at large, and the general fund of capital available for its use, and its only effect is to make capital somewhat cheaper than it would otherwise be; and a judicious and successful employment of it eminently conduces to the national prosperity.

56. The only advantage of the second method is that it makes capital more abundant; and sometimes might provide it when not otherwise obtainable. If it were scarce, or otherwise occupied, it might not always be possible to obtain it. If nobody had money to lend, the second method might supply the want, and so long as it is practised by judicious persons, and used in promoting successful operations, it is a great blessing. But it is just

on this very point, that it is liable to the most dangerous abuse. If the corporation were limited to the use of real capital advanced by some independent person, he would probably take into consideration the purpose to which it was to be applied, as well as the solvency of the corporation, and if he thought it injudicious, he would probably not advance it. There would therefore be so far a check upon them, but if they were totally destitute of control, and could embark in any operation, by simply writing a few "promises to pay" upon bits of paper, they may be led away into wild and dangerous speculations, deceived by false expectations of profit, and involve themselves and all who trust them in ruinous losses; because, though these promises to pay did not represent real advances, and are therefore inaccurately called fictitious capital, if they get into circulation and people give value for them in commodities or services, a disastrous operation based upon them is just as much loss of capital, as if they had been real advances.

57. In the case we examined of a Bank discounting the bill of the manufacturer A upon the dealer B, the transaction was already effected upon which it was founded. A had rendered the service to B for which he was to be paid at a future day, *before* he drew the bill upon him, and originally all bills of exchange represented previously existing debts, and they bore on the face of them the words "for value received" to testify the fact. So long, therefore, as they represented a past transaction and were discounted with real capital, they did not add to the capital of the country, but only afforded the means of directing it into a profitable channel. But the sharpness of traders discovered that they might be applied to *future* transactions.

58. In the case of a *past* transaction, the bill was

given by B, who had got the goods, to A who had given them, and A had got the money that would be payable to him at the maturity of the bill, advanced to him by the Bank on the credit of B's reputation, as well as his own. If B, however, be a person of wealth and reputation, he may lend the use of his name to A without any real transaction having taken place between them. Thus he may accept a bill of A's, and A, on the strength of his name, goes to his banker, and gets the money with which he performs some operation, such as manufacturing goods, and having done so he may advance them to C and take C's bill in payment of them, which latter is a real transaction. Now the whole of this operation is based upon the credit of B's name, it is not based upon anything real, or upon any service previously rendered; consequently it is in itself a completely new transaction. Such a bill between A and B is called an ACCOMMODATION BILL. This name is, however, not confined to cases where the acceptor lends his name for the accommodation of the drawer, though that is the most usual form, but wherever an acceptor, drawer, or endorser puts his name upon the bill, and therefore renders himself liable to a holder for value to discharge it, without, as the legal expression is, consideration moving to him, it is an accommodation bill, and the party for whose accommodation it is negotiated is bound by law to provide funds to discharge it at maturity, and also to indemnify the accommodation, acceptor, drawer or indorser, as the case may be, against the consequences of non-payment.

59. The practical effect of this transaction is simply that B stands security to the Bank for the money advanced to A; and there is nothing in the nature of such a transaction worse than for one man to stand security for another in any other commercial transaction. In some respects

they are much fairer to the person who runs the risk as security, because in the ordinary course when one person becomes security for another he does not receive any pecuniary recompence for the risk he runs, to which he was certainly most fairly entitled, whereas if it be done by way of accommodation bill he generally receives some *quid pro quo*, and when a bank performs an operation of exactly the same nature, it always receives a high interest for the risk it runs, and when judiciously done is a very profitable source of income. From the extravagant abuse however of such methods of raising capital, accommodation bills have acquired a most discreditable reputation, and there is nothing which requires more vigilance in a bank than to guard against being entrapped into making unwary advances on such securities.

60. A great deal has been said and written about the difference between real and accommodation bills, and while no terms of admiration are too strong for the first, no terms of vituperation are too severe for the latter. Thus, Mr. Bell* says: "The difference between a genuine commercial bill and an accommodation one is something similar to the difference between a genuine coin and a counterfeit," as if the act of negotiating an accommodation bill were in itself one of moral turpitude. It is also generally assumed that real bills possess some sort of additional security, because there is property to represent them. We have already seen, however, the entire delusion of such an idea, and that it is a great mistake to suppose that commercial bills have any specific relation to the property which they originally represented. In truth both real and accommodation bills have precisely the same security, they constitute a general charge upon the whole estates of all the obligants upon them. The

* Philosophy of Joint Stock Banking, p. 51.

objections to accommodation bills, therefore, on that ground are perfectly futile, for the security of both is exactly identical, and as Mr. Thornton long ago remarked:† "The supposition that real bills represent property, and that fictitious bills do not, seems therefore to be one by which more than justice is done to one of these species of bills, and something less than justice to the other."

61. The essential distinction between real and accommodation bills is, that one represents a *past* and the other a *future* transaction. But even this is no ground for any preference of one over the other. A transaction that has been done may be just as wild, foolish, and absurd as one that has to be done. The intention of engaging in any mercantile transaction is, that the result of it should repay all the outlay, with profit. There is no other test but this of its propriety, in a mercantile sense. Such things have been heard of in the mercantile world, as consignments of skates to tropical countries. Now a bill drawn against such a shipment as this would pass muster in technical language as a *real* bill, while one drawn to forward some other operation, however sound and judicious it might be, if it were not yet accomplished, would be an accommodation bill, and be branded as fictitious. Mr. Bell would call the former genuine coin, the latter counterfeit.

62. We see, therefore, that the common objections urged against accommodation bills are perfectly futile, and quite wide of the mark. Whether a bill be a good and safe bill, has no reference to whether it represents a past or future transaction, but whether it is a safe and judicious one itself, and the parties to it respectable and of sufficient means to meet their liabilities. The whole cash credit system of Scotland, which has conduced so

† Enquiry into the Nature and Effects of Paper Credit, p. 32.

eminently to the prosperity of that country, is a system of accommodation paper, which is sufficient to disprove in the mind of any dispassionate person, that the system is in itself necessarily dangerous and pernicious, but is proof enough that if it is judiciously managed it may be of great advantage.

63. The true objection to accommodation paper is of a different nature. When the credit system is carried on duly and properly, and within legitimate limits, it is the most ingenious method ever devised for promoting commerce, and where it has been cautiously used, has marvellously succeeded in so doing. But it is a very trite remark that the best things when corrupted become the worst. This is eminently true of paper credit. Universal experience proves that there is nothing so dangerous and pernicious as for individuals to have an undue facility for obtaining credit. When capital is to be had on too easy terms, it fosters to an extravagant extent the fatal propensity for embarking in all sorts of wild speculations, and pushing trade far beyond the possibility of being remunerative.

64. The considerations we presented shewed the exaggerated ideas of the security of real bills. But there is at least this security in real bills, that as they only arise out of real transfers of property, their number must be limited, in the very nature of things. However bad or worthless they may be individually, they cannot be multiplied beyond a certain extent. There is therefore a limit to the calamities they cause. But with accommodation paper there is no limit. A beggar may write upon bits of paper a million of "promises to pay" as easily as a Rothschild; and it is far more probable that he will do so; a man without a farthing is proverbially the most reckless, because when the bubble bursts it is a

matter of no consequence to him, he has nothing to lose, the misery and the ruin fall upon his unfortunate dupes. A man of real capital will be cautious in his operations, a loss to him will be real, but a man who is not worth a sixpence is indifferent whether he loses a £1000 or a £1,000,000.

65. Nothing can be more dangerous than for a bank to countenance a customer dealing in accommodation paper. If it chooses to take a particular bill on a special occasion, because it prefers to have a name as a security for an advance in that form, that is a different matter. But if such a thing goes on to any extent, it will almost infallibly terminate in a disaster to the bank. A sanguine projector gets his friends to accommodate him with their names upon bills which he discounts, undertaking, of course, to provide funds to meet them. This goes on well at first, the acceptances are punctually met, the bank in the mean time being totally in the dark as to who it is that finds the funds to meet the bills. The drawer having met the first bills, and having got a good name by the apparent punctuality of his bills, goes on deeper and deeper, and widening the sphere of his operations, till at last the returns fail to enable him to meet his friends' engagements, and the bubble bursts.

66. It is easy to show how much more dangerous it is for a bank to discount accommodation paper than real paper. Suppose it has discounted B's accommodation acceptance to A, then B, on the face of the instrument, is the principal debtor to the bank, which will of course make B pay, but as it is A's duty to provide the funds to enable B to pay, if he fails to do so, B has his immediate remedy over against A. So that if the bank presses B, he will immediately press A, just as every other surety is entitled to recover from his principal. But if A be not

in a condition to pay up immediately, and has other bills current in the bank, the latter dare not press B, for fear of ruining A, and inducing a greater catastrophe. Now if A gets ten of his friends to accommodate him with their names, and discounts these bills at his banker's, it is A's duty to provide funds to meet every one of these bills at maturity. If the bills were real, it would be the duty of the ten acceptors to provide funds to meet them, and the bank would have ten real principal debtors, nor would the bank hesitate to press any one of them who failed in his engagement. As all these accommodation acceptors were most probably induced to lend their names to A on his promise to provide funds to protect them, they in all probability took no pains to provide any funds to meet them, as few persons would put their names on an accommodation bill if they really thought they would have to pay it, and they are most probably ignorant of each other's transactions. In the case of real bills, then, the bank would have ten persons who would each take care to be in a position to meet his own engagement; in the case of accommodation paper, there is only one person to meet the engagements of ten. Furthermore if one of ten real acceptors fails in his engagement, the bank can safely press the drawer, but if the drawer of the accommodation bills fails to meet any one of the ten acceptances, and the bank suddenly discovers that it is an accommodation bill, and they are under large advances to the drawer, they dare not for their own safety press the acceptor, because he will of course have immediate recourse against his debtor, and the whole fabric will probably tumble down like a house of cards. Hence the chances of disaster are much greater when there is only one person to meet so many engagements, than when there are so many bound each to meet his own. These considerations show how extremely dangerous it is

for any bank to offer facilities for discounting accommodation paper, if it does so it may justly be said to it

> "Periculosæ plenum opus aleæ
> Tractas, et incedis per ignes
> Suppositos cineri doloso."

67. We see then that the real danger to a bank in being led into discounting acccommodation paper is that the position of principal and surety is reversed. They are deceived as to who the real debtor is, and who are the real sureties; being precisely the reverse to what they appear to be, which makes a very great difference in the security to the holder of the bills. To advance money by way of cash credit, or by loan with security, is quite a different affair, because then the bank knows exactly what it is doing, and as soon as anything occurs amiss, it knows the remedy to be adopted. Moreover, it never permits the advance to exceed a certain definite limit, but it never can tell to what length it may be inveigled into discounting accommodation paper; until some commercial reverse happens, when it may discover that its customer has been carrying on some great speculative operation, with capital borrowed from it alone.

68. The insurmountable objection, therefore, to this class of paper, is the dangerous and boundless facility it affords for raising money for speculative purposes. In almost every profession and business, there is, unfortunately, a system of conventional morality, under which many things are done, which to any other man would appear to the last degree dishonorable, but which being constantly done in that profession, seem wholly to fail in making that impression upon the members of it, which they would do upon the minds of persons whose moral perceptions were not warped. The fatal lengths of prevari-

cation and dishonor into which men are insensibly dragged when they have been once deluded into the seductive vortex of accommodation paper, to sustain for a little while longer the bubble before it bursts, would be utterly shocking to them in their sober moments.

69. There is much reason to fear that this pernicious system prevails to a much greater extent than is generally supposed. The Legislature has imposed bounds upon the issues of notes by banks, but there is much greater reason that some attempt should be made to curb the extravagant magnitude to which this detestable practice has been developed. There cannot be a doubt but that the methods that are used to deceive banks into making advances upon accommodation paper, are nothing else but commercial swindling—that is, obtaining money on false pretences. No doubt it may be said that a bank has it in its power to question its customers as to the character of their bills, and that they are themselves to blame for discounting bills with too great facility. But to ask a respectable customer if he deals in accommodation paper is much the same thing as to ask a gentleman if he were in the habit of cheating. Nothing can more clearly demonstrate to any person of sound and unbiassed mind that dealing in accommodation paper is dishonorable, than the fact that a respectable customer of a bank would consider it as little less than an insult to be thought capable of doing such a thing. It is a vain idea to suppose that a bank can investigate the character of every bill presented to it for discount; they must in general trust to the respectability of their customers, and it will probably be found, that when a man has a deep-laid design to pass off accommodation paper on his banker, he begins by endeavouring to acquire an excellent character for means and regularity, so as to ward off suspicion from

the banker's mind, and when he has once resolved to do the thing, he is not likely to be deterred from any verbal misrepresentation to complete the deception. To palm off accommodation paper as real on a bank is not one whit less a crime than to embezzle its funds.

70. All the great commercial catastrophes which have within recent times scattered such misery and desolation throughout the country, involving the innocent as well as the guilty in one common ruin, have been preceded and greatly caused by the abuses of this species of paper. All the acts of the Legislature to lay the issues of banks under stringent restrictions are perfectly futile, unless some effectual measures be taken to restrain the negotiation of accommodation paper, which can flourish quite as well under a metallic currency as under a paper one. The Bank of England is strictly forbidden to issue a single £5 note of accommodation paper, and the most respectable country banks are subject to heavy penalties if they permit more than a certain fixed quantity of their notes to be in circulation. Is it then to be tolerated that any set of adventurers may set afloat many hundred thousand pounds worth of their accommodation paper?* The enormous and heartrending calamities which the abuses of this system have brought upon the country, and which we have reason to believe will infallibly recur again under similar circumstances, loudly call for some remedy. Notwithstanding the principles of free trade, which should be rigidly adhered to, it has certainly become a very grave consideration whether some legislative interference is not

* In the late great failure of Oliver at Liverpool, it was stated in the *Times*, of Oct. 17, 1854, that Gardner and Co. had accommodated him with their name to the extent of £45,000; and late proceedings in bankruptcy have disclosed that a person named Jackson did the same to a nearly equal amount!!

imperatively necessary for the protection of banks, and of commerce in general, so as to render it illegal to present accommodation paper for discount without disclosing its true character.

71. To any one who knows the secret history of many of these transactions, by which banks have been inveigled into discounting accommodation paper, there can be little doubt that many of them are clearly indictable offences, by which is meant that such an amount of fraudulent representations were made as to amount to the legal offence of obtaining money on false pretences. If, therefore, banks which are liable to suffer so much by these frauds could be induced to combine and agree to indict the first person who imposed upon them, it would probably be somewhat effectual in checking the practice. But few bankers would be willing to take a prominent part in such a thing, as they would not like to make generally known the way in which they had been deluded, or the losses they had sustained.

72. It is necessary to observe, however, that such a provision as is above suggested, would be futile in the present state of the law regarding accommodation bills, at least as settled by decisions, which have not yet been reversed. For it is held, that when two parties draw bills upon each other for their mutual accommodation, such cross acceptances are good considerations one for the other. Thus in one case,* where A and B being desirous to accommodate each other, each drew a bill upon the other, and accepted one in return, the two bills being precisely alike, in the date, sums of money contained in them, and times of payment, and neither party having the effects of the other in his hands, the Court were clearly of opinion that the two bills were mutual engagements, constituting

* *Rolfe* v. *Caslon.* 2 H. Blackstone, p. 571.

on each part a debt, the one being a consideration of the other. And in another case,* this dictum was repeated and confirmed; Grose, J. said the instant the bills were exchanged, each was indebted to the other, in the sum which was the amount of their respective acceptances, for the counter acceptances were a good consideration to found a debt upon either side respectively.

73. It is impossible to imagine any thing that can hold out a stronger temptation to this pernicious practice than the above doctrine. A Bill of Exchange in the hands of a third party, is the same thing as a joint promissory note of the drawer and acceptor, and to suppose that a second joint promissory note of the same parties, should be a consideration for the first, seems a very strange idea. When a man is already a co-obligant as drawer on a bill, to suppose that he can make a good consideration for that note by becoming a co-obligant with the same party on another bill as acceptor, seems a most unaccountable doctrine. The evident natural effect of these cross acceptances, or mutual debts, should be to *cancel* each other, and not to *double* their amount. To suppose that a man can make a debt he already owes a *consideration* for incurring another, seems most extraordinary.

74. We know that in argument two negatives make an affirmative; that two sounds may produce silence; and two rays of light may produce darkness; but it is something quite novel, in our planet at least, that two debts can produce wealth, or that a man who has incurred one obligation, can increase his security by incurring another. A *consideration* means something serviceable, or valuable; if a man parts with property to another, that is a good consideration for a bill, the man who receives the property receives something *valuable*, but

* *Cowley* v. *Dunlop*. 7 T. R. 565.

what *consideration* can it be for a man to incur one liability with another person as drawer, to incur another liability with the same person as acceptor? If this be a good consideration, then indeed the philosopher's stone is at last discovered.—There is no need to cross half the globe in search of an El Dorado—only let two men provide themselves with abundance of pens, ink, and paper, and shut themselves up in a room, and they can soon make themselves richer than ever Solomon was.

75. If it were possible for each party to incur a liability on account of the other separately, and without himself being also bound, it might alter the case. But in accommodation paper, neither party incurs a liability for the other, without the other being also equally liable, a second bill is therefore nothing more than a dilatation of the first bubble, and to suppose that it can be a consideration or security for the first bubble, to swell it to twice its previous dimensions, is contrary to the usual experience of bubbles.

76. There is unhappily no law to restrain private adventurers from issuing any amount of this paper, so long as they are not bankers. Now if a bank had issued £10,000 of notes, on no consideration whatever, but its own credit, would any sane man maintain, that if it were to issue another £10,000 of similar paper, these two sums of £10,000 should be taken as mutually considerations for each other. Common sense revolts against such an absurdity, and it is equally revolting to common sense, to hold that if two adventurous speculators give each other mutual acceptances, that these should be considered as mutually considerations for each other.

77. We have already said that when a bill of exchange is accepted it resembles a promissory note made by the acceptor, with the name of the drawer on it as

collateral security. Banks are enabled by their promissory notes to take advantage of this method of creating capital, supposing that there is no law to prevent them. A farmer may have a farm, which is susceptible of great improvements, and if the bank is satisfied of his skill and integrity, and the security of his tenure, it may lend him the use of its credit, by advancing him a number of its notes, or promises to pay gold on demand, upon a certain stipulated price, or interest. The farmer engages workmen, and pays them with these notes, and if the bank is in good credit in the neighbourhood, they will be received by all the tradesmen in payment of goods, and so circulate from hand to hand, and perform all the functions of a currency, until they are paid into the bank again by some of its customers. If a bank enjoys a high reputation it may put into circulation an amount of notes far exceeding the quantity of gold it may find necessary to keep in its coffers, and by a little observation, it is easy to ascertain what will be the proportion of gold it will actually be called upon to give in exchange for its notes, and in ordinary times it need only keep a sufficient margin above that to cover any extraordinary demand that is probable to arise. Now it is clear that all the notes which represent the gold actually possessed by the bank are no addition to the capital of the country, but all the notes in circulation in excess of that, and which produce industry, or which people in general are willing to receive in return for their commodities as services, are a genuine addition to the capital of the nation, and resemble accommodation bills, just in the same way as an ordinary promissory note resembles a bill of exchange.

78. So long as this issue of accommodation notes is confined within due limits, and banks are careful to have a due regard to the persons to whom they issue these

notes, and the purpose for which they are issued, so that they only be applied to reproductive industry, which is the wealth which they foreshadow, they are a great blessing. It must be clearly understood that if they be issued in wanton excess, or without any representative in industry, they only go to increase the amount of currency which already represents a certain amount of industry, and their only effect will be to alter the relation between the currency and the services it represents, which will diminish the value of the whole currency, and raise the nominal price of commodities, but produce no increase of wealth to the community. It is an undoubted fact that a very great proportion of the prosperity of Scotland was produced, and is still maintained, by this system. The notes of the various banks there, which chiefly consist of great and powerful companies, are the chief currency, and such is the confidence placed in them, that they are universally received for gold, and it is very rarely indeed that the actual gold is demanded for them. The system will be more properly described in the chapter which includes Banking in Scotland.

79. The chief danger arising from such a system is what we have already described as inherent in the nature of accommodation paper,—its too great facility of extension beyond the limits of prudence, and the danger of its being applied by ill-judging persons to worthless objects. When people are dealing with real capital, they are more likely to investigate closely the nature of the operation for which they are to advance it, but if they have the power of creating it at will, they are apt to be led away into wild and reckless speculation, ending in ruin and misery, which shake even legitimate credit. Real capital is limited, but when persons imagine that they can create it by merely writing promises to pay on a bit of paper,

their brains are turned, and their vision dazzled by the imaginary prospect of wealth; and they perhaps are not duly careful to remember the essential truth, that an unremunerative operation undertaken by means of this credit system is just as much loss of capital as if it had been done with real capital. If such a system then is permitted to exist, the public interests require that there must be some method of restraining it within legitimate limits. To say that no bank, however powerful or solvent it may be, like the Bank of England, shall issue a single £5 note on its own credit, is carrying prudence to an absurd extreme; on the other hand, there must be some limit, natural or artificial, beyond which it should not be permitted to go, to guard the public against the evils of an undue extension. There must be some method by which if a bank issues more currency than can be absorbed by legitimate industry, the excess should be immediately thrown out of circulation, and returned upon its hands. This system has been carried to a greater length consistently with safety and natural prosperity, and has attained a greater perfection in Scotland than in any other country, for the simple reason, that banking has not been fettered with the unjust and pernicious monopoly which stunted and distorted its development in England. The whole system of banking in England was dislocated by law, but in Scotland it has grown up, and been moulded into its present form by the unfettered exercise of the judgment and ingenuity of men of business; and in the chapter relating to it, will be found described the checks and safeguards which are imposed upon the banks there, and which provide by their own natural operation against any undue issues by any single bank.

80. We have seen that bank notes are nothing but promissory notes of the bank, payable to bearer on

demand. No writer ever hesitated to admit that bank notes are essentially part of the currency of the country; and many regulations have been made restricting their issues. But banks have also bills of exchange, payable to bearer on demand, though, as they are the *acceptors* of these, they of course do not issue them. These bills are more commonly known by the name of *cheques*, and they in no way differ from bills of exchange except that they are favored under certain circumstances by the stamp laws; and there are certain other differences which have been established by custom, which will be described at the end of this work.

81. A bank note depends upon the credit of the bank; a cheque upon that of the issuer of it, because the acceptance of the bank is only conditional upon their having sufficient funds of the drawer in their hands to pay it. It is the intention of the law that all bills and notes, payable to bearer on demand, should be presented immediately for payment; that is to say, if any one takes them on payment of goods or services, and does not demand cash from the banker for them on the day he receives them, or, at latest, on the day after, and the banker fails, he has no recourse against the person he received them from. It is well known, that persons constantly run this hazard with bank notes, and they often remain out in circulation for months before they are presented for payment. The very same thing is often done with the cheques; if the drawer of them be a person in good credit, they often circulate from hand to hand for a considerable time before they are presented for payment.

82. The great and important portion of the currency which consists of cheques has not been sufficiently appreciated. The attention of speakers, writers,

and legislators, on the *paper currency*, has been almost exclusively directed to bank notes; whereas all the ideas involved in bank notes are, with a small change in the form of expression, applicable to cheques; and there is no operation whatever which a bank can promote by means of bank notes which it cannot with equal efficacy perform by means of cheques. If it wishes to advance a speculation, instead of giving its customer so many of its notes, it promises to honor his cheques to an equal amount. In Scotland the system of bank notes chiefly prevails; and cheques are of more recent introduction, and more sparingly used than in England. In this country, cheques have very greatly superseded bank notes, and in many respects are far superior to them. Among other reasons, they are not such ready weapons against a bank in the hands of rivals and enemies. It has been by no means an unheard-of measure of hostility against a bank which issues notes, for its rivals to buy them up in all directions, and, having accumulated a considerable amount of them, to present them for payment suddenly in a mass, in the hopes that the bank may be unprepared to meet, on the instant, so great a demand for gold, and be ruined. With cheques this method of hostility is more difficult. It is not easy to conceive that any person could go round to all the customers of a bank, and accumulate such an amount of cheques, as to render a demand for payment of them in gold formidable to the bank. At all events, it would require a much more elaborate and deep-laid plot to injure a bank by the method of cheques, than of bank notes.

83. It is often said, that no London banker issues notes; and hence it is often too hastily concluded, that no London bank but the Bank of England deals in paper

currency. But it is impossible to conceive a greater fallacy than this. Formerly, the London bankers all issued notes, or deposit receipts, which, before the stamp laws, were transferable by delivery. About seventy years ago, they dropped the practice of issuing notes directly themselves, and adopted one which was far more secure for themselves,—they gave each of their customers a book containing a number of blank acceptances, which he might fill up and issue at his own convenience, and these were called cheques. This system universally prevails at present, and is the very foundation of London banking; and to interdict that practice would be almost tantamount to suppressing banking, as we shall see that in former times the prohibition to issue *notes* was considered to create an effectual monopoly in favor of the Bank of England. Whatever effects, then, the system of issuing bank notes has upon speculation, or prices, or in driving gold out of circulation, is equally effectually done by cheques; and the inevitable tendency of a perfect banking system is to drive gold out of circulation, and to substitute paper for it.

84. We see, then, how utterly futile it is to attempt to form any estimate of the amount of paper currency in this country. Returns may be made of the stamps issued for bank notes, bills of exchange, and promissory notes; but how is it possible ever to discover the amount of cheques in circulation? If this cannot be done, it is useless to try to estimate the amount of the paper currency; and still more impossible is it to control the issue of paper, while the power of drawing cheques is unrestricted.

85. We must now consider a question which has been much discussed by different writers, — Is credit capital? Before making any observations of our own,

we will make an extract from Mr. Thornton's Essay on Paper Credit, which, though somewhat long, may, perhaps, be excused on account of the eminence of the writer, and the scarcity of the book. He says (page 19):—

"It may conduce to the prevention of error in the subsequent discussions to define in this place what is meant by commercial capital. This consists first, in the goods (part of them in the course of manufacture), which are in the hands of our manufacturers and dealers, and are in their way to consumption. The amount of these is necessarily larger or smaller in proportion as the general expenditure is more or less considerable, and in proportion also as commodities pass more or less quickly into the hands of the consumer. It further consists in the ships, buildings, machinery, and other dead stock, maintained for the purpose of carrying on our manufactures and commerce, under which head may be included the gold found necessary for the purposes of commerce, but at all times forming a very small item in this great account. It comprehends also the debts due to our traders for goods sold and delivered by them on credit, debts finally to be discharged by articles of value given in return.

"Commercial Capital, let it then be understood, consists not in paper, and is not augmented by the multiplication of this medium of payment. In one sense, indeed, it may be increased by paper; I mean that the nominal value of the existing goods may be enlarged through a reduction which is caused by paper in the value of that standard by which all property is estimated. The paper itself forms no part of the estimate.

"This mode of computing the amount of the natural capital engaged in commerce is substantially the same with that in which each commercial man estimates the value of his own property. Paper constitutes, it is true, an article on the credit side of the books of some men, but it forms an exactly equal item on the debit side of the books of others. It constitutes therefore on the whole neither a debit nor a credit. *The banker who issues* £20,000 *in notes, and lends in consequence* £20,000 *to the merchants, on the security of bills*

accepted by them, states himself in his books to be debtor to the various holders of his notes to the extent of the sum in question, and states himself to be the creditor of the acceptors of the bills in his possession, to the same amount. His valuation, therefore, of his own property is the same as if neither the bills nor the bank notes had any existence."

86. We cannot help expressing our surprise that the latter part of this extract, in italics, should have emanated from so able a person as Mr. Thornton. Nothing can be more erroneous than to say, that when a banker issues his own notes against mercantile securities, the debt and the credit are equal. Suppose that a merchant brings £20,000 of bills, (let them be 12 months' bills, for the sake of simplicity) to his banker, to be discounted at the rate of £5 per cent. The banker does not give him £20,000 of his notes in exchange for the bills, he only gives £19,000, so that if all these notes were immediately issued the banker would only be debtor to the amount of £19,000 and he would be creditor to the amount of £20,000, thereby leaving a clear sum of £1,000 which would be his own property. The result of such an operation would be, that the banker's liability would be £19,000, his assets £20,000, leaving a clear profit of £1000 to himself.

87. Mr. Thornton proceeds—

"Again, the merchants in making their estimate of property deduct the bills payable by themselves which are in the drawer of the banker, and add to their estimate the notes of the banker which are in their own drawer, so that the valuation likewise of the capital of the merchants is the same as if the paper had no existence. The use of paper does not, therefore, introduce any principle of delusion into that estimate of property which is made by individuals."

It is obvious that the error of this paragraph is exactly the opposite of the one in the preceding extract. If the valuation of the merchant's estate be taken imme-

diately after such a transaction with his banker, it is quite clear that he is *debtor* to his banker in £20,000, and the *creditor* of his banker in £19,000, leaving a balance of £1000 against him, which is the sum he has to pay to his banker for the accommodation he receives, and which he expects to procure, and pay out of the profits he realizes by the sale of the goods in respect of which the bills originated. If Mr. Thornton's idea was true, that the banker and the merchant each valued their debts and credits as equal, it would mean that the banker discounted the merchant's bills for nothing, or issued his notes for the full amount of the bills, and it is only in such a case that their mutual debts and credits can be equal.

88. Bankers discount merchants' bills either with the deposits of their customers, or with their own notes, which they trust to their own credit to obtain circulation. The one is sometimes called *real* capital, and the other *fictitious* capital, but such a distinction leads to great confusion of ideas, because the results to the banker are absolutely identical in either case. If he discounts by issuing his own notes, he is undoubtedly debtor to the holders of the notes, to their full amount, but if he discounts with the deposits of his customers, he is equally a debtor to his customers to the amount of these deposits. In both cases it is the *profits*, and the profits only, that are the banker's own property. If he can get his notes circulated at all, they produce him a revenue exactly in the same way that gold does. When the notes come back to him they are valueless, and he may be called upon to restore the deposits at any moment. On the other hand, if his transaction is unfortunate, the loss is absolutely the same in both cases. If the sum he issued belonged to his customers, and did not come back to him, it would be a loss of capital to him; if the issue be his own notes, he

must pay the holders of them, and he gets no return. In either case the loss is absolutely identical. From these considerations it follows that a banker's notes in circulation are quite as much banking capital to him as gold deposited with him by his customers, and the profits and losses arising from any operation are identical in each case.

89. This double nature of banking credit has not, that we are aware, been pointed out with sufficient distinctness, but it is of prime importance in comprehending the effects of the system of banking. Adam Smith says,*

> "The whole paper money of every kind, which can easily circulate in any country, never can exceed the value of the gold and silver, of which it supplies the place, or which (the commerce being supposed the same) would circulate there if there was no paper money. If twenty shilling notes, for example, are the lowest paper money current in Scotland, the whole of that currency which can easily circulate there, cannot exceed the sum of gold and silver, which would be necessary for transacting the annual exchanges of twenty shillings value and upwards usually transacted within that country."

There would appear to be a considerable misconception in this passage as to the power of banking credit. Adam Smith appears to mean that the notes issued by a bank will only supersede and displace a certain amount of gold and silver currency that was already in circulation. But this is a very limited and inadequate view to take of the subject. If a bank enjoys good credit, it can easily put into circulation an amount of notes considerably exceeding the quantity of gold and silver displaced. Now if these notes are generally received, and pass cur-

* Wealth of Nations, Book II. Chap. II. Vol. II., p. 291. Wakefield's Edition.

rent at their par value, they are in all respects equally efficacious in promoting industry as if they were gold and silver. John Law took a juster view of the matter. He says,*

"The fund of the bank of Scotland was £100,000, of which a tenth was paid in . . . . Its notes went for four or five times the value of the money in the bank, and by so much as these notes went for more than the money in the bank, so much was added to the money of the nation."

90. We have observed (Chap. I. § 56.) that "capital" is usually applied in popular language to money, and that a person who has plenty of money at command is commonly called a "capitalist," but that by an easy transition, the word capital is also applied to those things in which money is invested for the purpose of producing a profit to their owner. When used in reference to these articles, it is called floating or fixed capital according to circumstances, but when we use the word "capital" simply without any qualification, we mean currency, or what is classed under the third head of the term resources in Chap. I., § 50. By the word "capital" then we mean the MOVING POWER of commerce. In short, capital is to commerce very much what *fuel* is to the engine.

91. Now, it is quite clear that if by any ingenious contrivance we can increase the effective force of the moving power, that is strictly and justly to be considered as an augmentation of that moving power. If by the addition of any chemical substance to one ton of coals, we could make that ton evaporate exactly twice as much water as it did before, we should justly say, that we had twice as much moving power at our command as we had

* Money and Trade considered, p. 69. Glasgow Edit., 1750.

before, and the same quantity of coals would generate twice as much motion in the engine as before.

92. Now, we have already shown that the inevitable, and partly unintended, effect of a bank of deposit and discount is to increase the moving power of any quantity of money deposited with it. We have also shewn that the quantity of its notes which are in circulation, and generally received as current at their par value, are equally efficacious in promoting industry, or serving as the moving power of commerce, as gold and silver. Now, all its paper obligations in circulation, either by way of cheques, bills, or notes, over and above the money or metallic currency which they are based upon, are a clear addition to the moving power of its deposits, which we are justly entitled to consider as equivalent to an increase of capital. But this excess of its paper obligations above its metallic deposits is its CREDIT. It is the *credit it enjoys*, and as we have already shewn, is the foundation of a considerable amount of the *credit it grants*, and we may call it BANKING CREDIT. We have shewn, then, that this banking credit is equivalent to capital in promoting commerce, and we have also shewn that, a loss sustained through the misuse of this credit is exactly the same as a loss sustained by the misuse of real capital. Hence we see that the consequences of the use or abuse of this banking credit are absolutely identical with those of the use or abuse of real capital, and we therefore consider it strictly correct to say that BANKING CREDIT IS BANKING CAPITAL.

93. Now, what is mercantile capital? It is the purchasing power of the merchant; it is the moving power at his command to generate a circulation of commodities, out of which he reaps his profit. Now it is absolutely identical to him whether he acquires this mov-

ing power by means of credit, or real capital. The effect upon the market and upon prices is exactly the same whether purchases, *i. e.*, circulation of commodities, be generated by credit or real capital; the profits and the losses are exactly the same to the merchant, whether the operation be effected by credit or real capital. It would be perfectly easy to shew this by going through every operation step by step, but a little consideration will render it so perfectly obvious, as to make it superfluous, and we need not be delayed in coming to our conclusion, which is, that MERCANTILE CREDIT IS MERCANTILE CAPITAL.

94. Now as all credit is either banking or mercantile, the result of all these considerations is, that it is strictly correct to say that CREDIT IS CAPITAL.

95. But we may arrive at the same conclusion in a shorter way. For what is Capital, in the ordinary sense? It is that portion of currency which is employed in reproductive operations. When the harvest is reaped, part of the corn is consumed and part is sown again. Now currency is like corn, the part that is consumed is revenue, and the part that is sown again is capital. But currency, according to the definition we have endeavoured to establish, is *transferable debt*, or power of commanding services. Capital, therefore, is this power of commanding services, which accrues from the accumulation of savings of its owner. But what is credit? Credit is also the power of commanding services. Credit is the creation of transferable debt, and the amount of these transferable debts a man can put into circulation, or which he can use as a moving power to command the services of others, is the measure of his credit, and a fortunate or disastrous use of this moving power has precisely the same effects upon him, whether it be real capital or credit. Hence we conclude

as before, that it is strictly correct to say that *credit is capital.*

96. From the foregoing observations, and the reflections they suggest,—when we see that a cheque upon a banker is almost equivalent to a bank note, and that there is no method, short of absolute prohibition, of restraining the amount of cheques in circulation, an attempt to limit the *paper currency* by imposing restrictions upon the issues of bank notes, is wholly ineffectual. A restriction of that nature, to be effectual, should coincide with the extent of the paper currency. An attempt to limit only one kind of it, will no more succeed than an attempt to keep a fog out of a field by shutting the gate. It is recorded, as a joke against a celebrated philosopher, that, having a hole in his door for his cat to come in at, when his cat had a kitten, he cut a little hole for the use of the kitten. Now, the issue of bank notes is to the paper currency in general very much in the proportion of the very smallest kitten to the very largest cat. An attempt to restrain the paper currency by the simple limitation of bank notes, is the converse of the proceeding of the philosopher, for it is trying to exclude the cat by closing the little hole. If, then, there should be any such axiom as this afloat, "That the issues of banks should be regulated by law as if they were metallic currency," we may venture to say that it would be a very great fallacy. We see at once that it is antagonistic and hostile to the whole genius of banking. On the other hand, if the principle we have been endeavouring to establish be correct, namely, that banking credit is banking capital, and that the consequences of the use, or abuse, of either are absolutely identical, it would rather suggest this principle to us,—That the great desideratum in banking is to *devise such a system of banking, that banks shall be*

as cautious, prudent, and circumspect in their issues as if they were dealing with metallic currency.

97. In describing the characteristics of "currency" in our first chapter, there is one which, though apparent from the description of it there given, has not been insisted upon with sufficient distinctness. It is this, that an essential feature of a currency is, that it is a general charge of debt upon the person of the obligant or debtor, and not a title to any specific or particular articles. Thus in § 20, where the wine merchant is supposed to take the grocer's promise to furnish a half pound of tea, when required, in payment of the wine he lets him have, it must be distinctly understood that this is a general power to demand so much tea from him, and not a particular appropriation of any specific quantity of tea. Bills of exchange and promissory notes conform exactly to this distinction. They must be a *general* power to demand a certain sum of money from a certain person. If a bill is made payable out of any specific fund, it immediately ceases to be a bill of exchange. It is enough to point out this very important point here, it will be further elucidated afterwards. From this circumstance, although a bill of lading, or a dock warrant, is transferable from hand to hand like a bill of exchange, it is *not* currency because it is merely the title to certain specific goods, and does not involve any personal liability.

98. We must conclude this long chapter by examining some opinions expressed by some eminent persons in the commercial world respecting bills of exchange and promissory notes. If the definition of currency which we have endeavoured to establish be admitted, it necessarily and immediately follows that bills of exchange and promissory notes are part of the paper currency of the country, and we have included them in the description of the

different species of it. Since monetary science has been the subject of controversy, different authors have held opposite opinions as to whether bills and notes are part of the circulating medium of the country. Mr. Walter Boyd, an eminent merchant, says:*—

"By the words 'Means of Circulation,' 'Circulating Medium,' and 'Currency,' which are used almost as synonymous terms in this letter, I understand always *ready money*, whether consisting of bank notes or specie, in contradiction to bills of exchange, navy bills, exchequer bills, or any other *negotiable* paper which form no part of the circulating medium, as I have always understood that term. The latter is the *circulator*, the former are merely *objects of circulation*."

On the other hand, Mr. Thornton, writing soon afterwards, after describing the uses of bills of exchange, says:†

"They evidently form, in the strictest sense, a part of the circulating medium of the country."

And in a note to this passage, censures Mr. Boyd for propagating the same error, into which many others had fallen, of considering bills as no part of the circulating medium of the country.

99. The opinion here expressed by Mr. Thornton, is in such exact accordance with the doctrine maintained throughout the previous chapters, that it would have been quite unnecessary to have dwelt longer upon the subject, but several witnesses of great banking and commercial eminence, having been examined before a committee of the House of Commons in 1840, gave it as their opinion

* Letter to the Right Hon. Wm. Pitt, on the Influence of the Stoppage of Issues in Specie at the Bank of England on Prices; by Walter Boyd, Esq., M.P. P. 2, note, 1801.

† Essay, &c., p. 40. 1802.

that bills and notes were not currency, and we must examine into the reasons alleged by them in support of that opinion. Thus, Mr. Cobden* said that there was a great distinction between a bill of exchange and a bank note payable on demand, as the former bears interest until it is due, as no one would take it with three months to run, without being allowed discount upon it; and as the longer it is kept the more interest it bears, there is not the same motive for putting it into circulation as there is a note. He also said that a bill follows the trading transaction, and is merely a voucher for it in the shape of a transfer of the debt.

100. Mr. J. B. Smith, President of the Manchester Chamber of Commerce,† considered bills not to be currency, but only a debt; that the difference between a bill and currency is, that the latter would discharge a debt, but the former would not; that the passing of a bill is a mere transfer of a debt, but a payment in currency is a discharge of a debt. But country bank notes were currency.

101. Mr. W. R. Wood‡ considered the metallic money and bank notes of all sorts currency, but excluded bills of exchange from that name; although he admitted that they frequently performed the functions of currency in making payments, yet they always did so with certain marked distinctions, inasmuch as, to pay a debt with a bill must always be a matter of bargain, that such payment does not release from liability, and that a party receiving payment of a debt would always prefer receiving it in bank notes to receiving it in a bill.

102. Mr. G. W. Norman § did not consider bills of

* Report of Committee on Banks of Issue, 1840. Evidence. Questions 559—578.

† *Ibid.*, 70—99. ‡ *Ibid*, 591. § *Ibid*, 1694—6.

exchange as currency, but as banking expedients to economise currency, and they do not possess fully the qualities which he considered money to possess. He said that the three most essential qualities which money should possess, are, that it should be in universal demand by everybody, in all times and in all places, that it should possess a fixed value, and that it should be a perfect numerator. Now, banking expedients of all sorts do not possess these qualities fully, but only in a very low degree. A bill of exchange was of no use to a man unless it was endorsed to him; he cannot go into a shop with one and buy what he wants, nor can he pay his laborers with a bill of exchange. So with banker's deposits; he cannot do with them whatever he can do with sovereigns and shillings.

103. Mr. S. J. Loyd expressed exactly the same opinion as Mr. Norman.* He said:—

"The precious metals, converted into coin, constitute the money of each country. That coin circulates sometimes in kind; but in highly advanced countries it is represented, to a certain extent, by paper notes, promising to pay the coin to bearer on demand, these notes being of such a nature in principle, that the increase of them supplants coin to an equal amount.† When these notes are in use, the metallic coin, together with these notes, constitutes the money, or currency of that country. Now, this money is marked by certain distinguishing characteristics; first of all, that its amount is determined by the laws which apportion the precious metals to the different countries of the world; secondly, that it is in every country the common measure of the value of all

* Report of Committee on Banks of Issue, 1840. Evidence Questions, 2663—4.

† We have already shewn the error of asserting that bank notes only displace an *equal* amount of coin; on the contrary, they are capable of being beneficially employed where coin never existed.

other commodities, the standard by reference to which the value of every other commodity is ascertained, and every contract fulfilled; and thirdly, it becomes the common medium of exchange for the adjustment of all transactions *equally at all times between all persons, and in all places*. It has, further, the quality of discharging those functions in endless succession. Now, I conceive that neither deposits nor bills of exchange in any way whatever possess these qualities. In the first place, the amount of them is not determined by the laws which determine the amount of the precious metals in each country. In the second place, they will in no respect serve as a common measure of value, or a standard by reference to which we can measure the relative values of all other things; and, in the next place, they do not possess that power of universal exchangeability which belongs to the money of the country."

104. The above witnesses all used the words "currency" and "circulating medium" as synonymous; and we may now make a few observations upon their opinions which will not detain us long. Mr. Cobden's distinction, that a bill of exchange is only of use for the transfer of a debt, is answered at once, because that is the *very definition* we have endeavoured to establish of a currency.

105. Mr. Smith's and Mr. Ward's opinion that passing a bill was a mere transfer of debt, that paying in currency was a discharge of it, and that a payment by bill must always be a matter of bargain, and that such payment did not release from liability, are objections that are equally applicable to bank notes. Payment by country bank notes is always matter of bargain. No man can be compelled to receive country bank notes in payment of a debt, any more than a bill of exchange. Bills and notes payable to bearer on demand, *i. e.*, cheques and bank notes, are intended by law to be presented *immediately* for payment, either on the day of receipt, or at least on the day after, precisely as a bill of exchange is intended to be

presented for payment on a fixed day. In both cases, if the receiver of the bill or note, has it endorsed and presents it in proper time, the endorser is liable, in both cases, if he fails to do so the endorser is discharged. There is not a shade of difference in *principle* between the two cases, only that one is payable immediately, and the other on a future day. Notes which are issued by bankers generally enjoy better credit, and are more willingly received, in some cases, than bills; but it is to the last degree unphilosophical and incorrect, to consider them of a different *nature*, because one is of a somewhat more eligible *degree* than the other. It would be just as correct to say, that iron heated to the temperature of 100°, was of a different *nature* to iron heated to 200°. One species of currency has a greater degree of eligibility for circulation than another, but still it is currency. Coal and wood in the furnace of a steam engine have different degrees of evaporating power, but still they are both *fuel.*

106. It is not a little amusing to find the celebrated phrase of the Roman Catholic Church,—*Quod semper, quod ubique, quod ab omnibus*, starting up and meeting us in a discussion on currency. In Mr. Loyd's opinion, money and currency are identical, and include the coined metallic money, and the paper notes promising to pay the bearer coin on demand; and he says that the characteristic of their being money, is, that they are received equally at "*all times, between all persons, and in all places.*" In order to avoid prolixity, let us denote this phrase by the symbol A^3 (from the three alls in it). He excludes bills of exchange from the designation of currency, because "they do not possess that power of universal exchangeability which belongs to the money of the country." It is impossible to imagine a definition which could be more suicidal to Mr. Loyd's view than the one he has chosen.

In fact, if it be true, there *is no such thing as money or currency at all.* In the first place it excludes the whole of the issues of bank notes at one fell swoop. The notes of a bank in the remote district of Cumberland would not be current in Cornwall, *therefore* they are not A^3, *therefore* they are not currency. Again, the notes of a bank in Cornwall would not be current in Cumberland, *therefore* they are not currency. Similarly, we may almost say that there are no country bank notes at all which have a general currency throughout England, therefore no country bank notes are A^3; *therefore* no country bank notes are currency. Till within the last thirty years the notes of the Bank of England had scarcely any currency beyond London and Lancashire; in country districts a preference was universally given to local notes, therefore Bank of England notes were not A^3, they had not a power of "universal exchangeability;" *therefore* they were not currency. If, therefore, the test of A^3 and "universal exchangeability" be applied, the claims of all bank notes to be considered as currency are annihilated at once. The acceptance of a Baring or a Rothschild would be received in payment of a debt by a far larger circle of persons than the notes of an obscure and remote country bank. But Mr. Loyd further excludes bills from the term "currency," because their amount is not determined by the laws which determine the amount of the precious metals in each country. But is the amount of bank notes determined by these laws? He says that the increase of bank notes only supplants coin to an *equal* amount; but this is a most extraordinary assertion for a banker to make. Where the issue of them is free, it is absolutely certain that their amount will greatly exceed the amount of gold and silver coin that ever would have existed.

107. But the universality of Mr. Loyd's assertion is fatal to his argument in other ways. On the Continent silver is the legal standard of value, in Great Britain silver, like copper, is merely coined into small tokens, called shillings, &c., which are made to pass current above their intrinsic value, and are only legal tender for a very trifling amount, hence it cannot be used in the adjustment of *all* transactions, *therefore* it is not A^3, *therefore* it is not currency. There are other countries where gold is not a legal tender, therefore it fails to satisfy Mr. Loyd's test, therefore it is not currency. If then, the test proposed by Mr. Loyd be considered as correct, it is easy to see that there is no substance, or material whatever that will not fail under it, and, therefore, *there is no such thing as currency.*

108. The fact is that the only difference between a bill of exchange and a bank note is that the former is a deferred payment, and the latter is an immediate one, and there is less risk in taking the latter than the former. From these circumstances a bank note possesses a greater *degree* of circulating power than a bill of exchange, for it does not increase in value by keeping. It is therefore unprofitable to keep it idle. But if a bill be taken in payment the interest for the time it has to run is deducted from the amount at the time it is received in payment, and there is not therefore the same inducement to put it into circulation as a bank note. But it is to the last degree unphilosophical to maintain that these two obligations are of different *natures* because they are adapted to circulate in different *degrees.*

109. But while we contend that Mr. Loyd's criterion of a currency is fatal to his own view, we are quite willing to accept it. For what is it that exists in all places, in all

times, and among almost all persons? DEBT, or SERVICES DUE.—And what is it that is universally required to measure, record, and transfer them? *Some material.*—We are therefore strengthened in our conviction that the only true idea of a currency is, that it is the REPRESENTATIVE OF TRANSFERABLE DEBT; and that WHATEVER REPRESENTS TRANSFERABLE DEBT IS CURRENCY.

CHAPTER VI.

ON THE THEORY OF THE EXCHANGES.

NECESSITY FOR MONEY CHANGERS—DIFFERENCE BETWEEN MONEY CHANGING AND BANKING—FOREIGN EXCHANGES—DETERIORATION OF THE CURRENCY CAUSES A FALL IN THE FOREIGN EXCHANGES—THE MINT AND MARKET PRICE OF GOLD BULLION—DESCRIPTION OF THE COMMERCIAL OPERATIONS OUT OF WHICH THE EXCHANGES ORIGINATE.

1. Next to a universal language, it would be the greatest commercial blessing to all nations, if they could agree to use one uniform measure of value, and the same weights and coins. No small part, nay, we might almost say the chief part of the intricacy and subtlety of the subject of exchanges, arises from different nations using different metals as the legal measure of value, and coins of all different denominations and values. If all nations could be brought to a uniformity on these subjects, there would be no more difficulty in understanding the theory of exchanges between them than between England and Scotland. The artificial intricacy of the subject of exchanges gives rise to the employment of a considerable amount of labor, which is unprofitable to the community at large, exactly in the same way as a superfluous amount of techni-

cality in a system of law gives rise to a large amount of unnecessary law business. Every one who has travelled abroad knows how detrimental the different exchanges are to his purse, as he passes through the different states. If any one were to take a quantity of money with him abroad, and pass through several different states, like those in Germany, it would soon dwindle away to almost nothing by the repeated operation of exchanging it for the current money of the country he happened to be in at the moment. The profits of the money-changers, as they do not arise out of natural operations, but out of the artificial distinctions in the different coinages, are wholly unprofitable to the community at large, because in this case it is true, what many people think of real commerce, that the gains of one party are wholly made up of the losses of a number of others, whereas the test of genuine commerce is that both parties gain by the very nature of the transaction. It is clear that the gains of the money-changers are no more additions to the wealth of the community, than the practice of sweating sovereigns in a bag, where the apparent profit is made up of the losses on each coin.

2. Banking first grew out of the operations of the money changers, and was first practised by them, but yet banking and money-changing are wholly different in their nature. The latter produces no benefit to society, the necessity for it only arises out of the artificial and unnecessary defects of the commercial regulations of nations. If these were put on a better footing the whole trade of money-changing would be swept away at a breath. As the want of proper sanitary arrangements often breeds the diseases which cause the necessity for medical men, so it is the imperfection of the monetary systems of the world that produces the necessity for money-changers. Banking on the contrary is wholly different in its nature; it

is genuine commerce, and like all genuine commerce it promotes the interests of both parties, it blesses him that lends, and him that borrows, and augments the prosperity and wealth of the community at large. The correction of the imperfect system which gives rise to the necessity of money-changers would be an unmitigated blessing to every nation in the world, the abolition of banking would be the direst blow commerce could receive.

3. So long, however, as this imperfection in the monetary system exists, and nations continue to act against their own interests, the business of money-changing is rendered necessary, and the theory of the exchanges requires to be studied as an essential branch of banking.

4. When nations advanced beyond the stage of direct barter, and began to use the precious metals as a common measure to which the value of all other commodities was referred, it was the *weight* of the pure metal which was universally used as the index of value, and merchants carried scales about with them, for the purpose of weighing out the metal on each separate occasion. To make the transaction complete they should also have assayed the metal on each purchase, because fraudulent dealers might adulterate it. However, assuming that the bullion was always of proper fineness, values were estimated by the weight of the metal. However, the necessity of carrying about scales to weigh out the metal on each separate occasion being felt to be tedious and irksome, the plan was devised of cutting the bullion into pieces of a certain definite weight by the public authority, and putting a stamp upon them to certify to the community that they were warranted to contain a certain weight of bullion of a certain definite fineness. Values were then estimated by the number of these pieces of bullion, which were called coins, which were given for commodi-

ties, and then they were said to be reckoned by *tale*. It is clear that the sole object of coining was to save the trouble of weighing, and that, though the prices of articles were estimated in figures, it was essentially part of the understanding that these figures denote certain specific quantities of pure metal.

5. So long as these coins circulated in the country in which they were issued, they might diminish considerably in weight, without losing their value. People are so accustomed to attach a certain value to the sight of a particular coin, that (unless they be money dealers) they will not stop to inquire too curiously whether it is exactly of the proper weight or not, and in fact when a coinage has been long in use, few people know what the legal weights of the different coins are, many do not associate the idea of a pound, for instance, with any particular weight of bullion, still less have they usually the means of detecting whether it is of the proper purity, and if every one be willing to receive it, and give his commodities or services for it at its nominal value, it makes little difference what its weight is. When coin has been some time in circulation its true value must necessarily fall below its nominal value, from the wear and tear of circulation, even if it be not subjected to any bad practices, such as clipping or sweating, and in states which cannot afford a frequent recoinage, this deterioration often proceeds to great lengths. In many instances in this country, and so late as 1816, when the last great reformation of the coinage took place, a large portion of the circulating medium was nothing but a thin wafer of silver, from which all traces of an impression had long since vanished, and reduced to scarcely more than half its proper and legal weight; and the same is the case with some of the continental states at this day, especially in Italy.

6. When these coins, however, are carried to a foreign country, they are of no value beyond their intrinsic weight as bullion. Though the natives of the country it belonged to, from long habits, and association of ideas, see in it a certain denomination and may receive it at its nominal value long after it has lost its legal weight, a foreigner sees in it nothing but so much bullion. When a person takes the coin of one country and purchases the coin of that country with it, he is said to *exchange* it. Now suppose that the coinage of two countries is of the same metal, and that both of the coinages be of their full legal weight and fineness; then if either of them be taken as a standard, which may be called A, then the number of units, or parts of a unit, of the coinage of the other, which may be called B, which contains precisely the same quantity of pure bullion, is called the PAR OF EXCHANGE between the country A and the country B. Thus, if the legal standard of France and England were gold, and the pound be taken as the standard unit of England, the number of the standard units of the French coinage which contained precisely as much pure gold as the English pound, would be the par of exchange between England and France. The French standard is the franc, which is a silver coin. The gold napoleon is also legal tender, which is twenty francs. Now there is as nearly as possible one-fourth more pure gold in a sovereign than in a napoleon, therefore, as the par of exchange is the ratio between these two coins, we might say that 1·25 is the par of exchange between England and France. But as it is invariably expressed in *francs*, 1·25 napoleons is equivalent to 25 francs, and hence we may, for the sake of argument, call 25· the par of Exchange. Hence, if an English sovereign would exchange for 25 francs in Paris, we should say that the exchange was at par.

7. Though a worn and depreciated coinage might pass for its full nominal value in its own country, in a foreign county it will evidently only exchange for its actual weight in bullion, hence if the English coinage of sovereigns became worn and clipped, or much diminished in weight, they would not exchange for so many francs as they would do if they were of full weight, hence an English sovereign, if taken to Paris whilst the French coinage maintained its full weight, in such a depreciated state, might only exchange for 22 or 20 francs, and this would be called a *fall in the foreign exchanges*, or if an English merchant were bound to pay his creditor in Paris 2500 francs, he would have to give more than £100 English to purchase them; and the exchange would be said *to be so much per cent. against England*, by the amount of that difference.

8. It is evident that this adverse state of the exchange would continue, so long as the English coinage remained depreciated; but that if it were restored to its legal standard, that restoration would be itself sufficient to restore the exchange to its usual rate. Hence, we see that if any foreign country maintain its coinage of full weight and purity, that *a depreciation of the coinage of England necessarily produces an apparently adverse state of the exchanges, and that a reform of the English coinage is sufficient by itself to restore them to their proper state.*

9. It is also evident that a depreciation of the coinage by a debasement of its purity, will produce exactly the same effects. It is also clear that if the coinages of both countries were equally degraded, the rate of exchange would not be altered between them; and that the rate would vary just in proportion as one was more or less degraded than the other.

10. It is also evident that there can be no true par

of exchange between two countries which do not employ the same metal as their legal standard. We have seen in a former chapter the insuperable objections to employing two metals as legal standards in the same country. Up to a comparatively recent period gold and silver were equally used, and their relative values were fixed by law. This was their legal par of exchange, but we also saw that their market values were constantly varying, and from causes quite beyond the reach of any law, and that it was no more possible to have a fixed price of one in terms of the other, than to have a fixed legal price for corn or any other commodity. The very same rule must clearly apply to two countries, one of which uses gold and the other silver as their measure of value. Hence, in speaking of the par of exchange between England and France as 25·20, which it usually is, or that £100=2520 francs, it is only on the assumption that the relative values of gold and silver are fixed, which we know can never occur between any two countries, any more than between the same metals in the same country. The only correct mode of expressing it is therefore to say that such is the *usual rate of exchange* between the two countries.

11. In the year 1797, when the Bank of England stopped payment, the House of Lords appointed a committee to investigate the whole subject. The committee, among other things, wished to ascertain the par of exchange between London and Hamburgh, and they examined several merchants upon the subject, but they were quite unable to agree among themselves what was the par of exchange between those two places; and the committee reported that they were unable to come to any satisfactory conclusion on the subject, and in this they were correct. And the very same reasons apply to any other two countries which use different metals as measures

of value, as there is not in the nature of things any permanently fixed relation between them. Hence, there cannot be in the nature of things any fixed par of exchange between England and any country that uses exclusively a silver standard. The most that can be said is, that there is a usual rate of exchange between them; hence, between such countries it is often totally impossible to decide certainly which way the exchange is, unless the difference exceeds a certain limit. At the time of the foundation of the Bank of England, in 1694, the coinage of England was in such a disgraceful state from the wear and tear of many years, and extensive clipping, that the rate of exchange between London and Hamburgh, owing to this circumstance alone, was 25 per cent. against England.

12. If the coinage of a country fall into a degraded state from long wear and tear, and a new coinage of full weight be issued, and allowed to circulate along with it, one of two effects must inevitably follow: either those persons who have commodities to sell will make a difference in the nominal price of articles, according as they are paid in the full-weighted, or the degraded coin, that is, the degraded coin will be at a discount as compared with the heavy coin; or, if there be a law to prevent this, and to make both pass at the same value, the bullion dealers will immediately collect all the full-weighted coins they can and melt them down into bullion; so that the new coinage will quickly disappear from circulation.

13. If persons in selling their goods made a difference in the nominal prices of them, according as they were paid in light or heavy coin, so as to secure a certain weight of bullion in exchange for their goods, they would of course require a larger number of the light pieces than

of the heavy ones, and so prices would apparently rise if paid in light gold. This would be precisely analogous to a rise in the rate of exchange against England, caused by the depreciation of the coinage.

14. In such a state of things the prices of goods are evidently fictitious--a number of light pieces are presumed to have the same value as the same number of heavy pieces. Merchants raise the prices of their goods to secure to themselves a certain weight of bullion, and that weight of bullion is expressed in a greater number of figures than it ought legally to be; and yet, supposing no discount is made for heavy pieces, the same number of heavy pieces will purchase no more. This is as great an anomaly in commerce as it would be in arithmetic to say that three were equal to four. But the consequence is very plain. If four pieces of coin will only purchase as many commodities as three ought to do, no one will turn bullion into coin at so great a disadvantage. On the contrary, as bullion would diminish so much in value, it would be sent to other countries, where it would purchase a greater amount of commodities. Hence, the infallible effect of a fall on the foreign exchanges caused by the depreciation of the currency is not only to prevent bullion being imported into it, but to drive out what bullion there is already in it to foreign countries.

15. We may take an example. Let us suppose that the coinages of England and France were so related that twenty pieces of French coin contained precisely the same amount of pure gold as sixteen pieces of English coin. Now, suppose that while the French coin maintained its standard, the English coin became so degraded that twenty pieces of it only contained as much gold as sixteen ought to do; then the exchange would rise 25 per cent. against England. Now, if traders in England

were prohibited by law from making a difference in the prices in their goods, according as they were paid in light or heavy coins, it is clear that no one would bring bullion from France to England when it would cost them twenty pieces to buy the goods they ought to get for sixteen. No one would bring his commodities to a market where they were artificially depressed below their proper value, any more than he would willingly purchase a loaf of bread of short weight. So such a state of things would effectually preclude any bullion from being brought into the English market, and would, besides that, cause any bullion that was already in the country to be exported.

16. A general depreciation of the coinage, therefore, infallibly causes a fall in the foreign exchanges, or, in other words, causes the English coinage to fall to a discount; and this can only be removed by a sedulous attention to preserve the coinage at its full weight, and to cause all coins which are not of full weight to be withdrawn from circulation; or, if not, instead of forcibly compelling people to receive light coins at the same value as heavy ones, they ought to be encouraged to make a difference between them, so as to remove the temptation to tamper with the good coinage.

17. Precisely analogous to a rise of the foreign exchanges adverse to England, caused by the depreciation of the coinage, is a difference between the mint price and the market price of gold. The term "mint price" has somewhat changed its meaning since it first came into use, a circumstance which has escaped the attention of many writers, and, as it is not unusual to see many mistaken notions of it in print, it will be no loss of time to dwell upon it somewhat minutely.

18. The word "price," except in the single instance we are now considering, is invariably used to denote the

quantity of one article used as a standard, which is given for another article of a *different* nature; thus, we say that the price of a bushel of corn is six shillings, where the silver, the substance of which the shillings are composed, is of a different nature to the corn. During the period when gold and silver were equally legal tenders, we have seen that their relative values were fixed by law, and a guinea was supposed to be equal to twenty-one shillings in silver, at its market value; and if the bank wished to purchase gold with silver, they would have to pay twenty-one shillings in silver for every quantity of gold equal to a guinea; and if this could always be done, twenty-one shillings would always be the market price of a guinea's weight of gold. Measured by the relative values of the metals at the time the standard was fixed in 1717, an ounce of gold was held to be worth 77s. 10½d. in silver, and, accordingly, as every twenty shillings was called a pound, £3 17s. 10½d. was the market price of gold per ounce at that time. During the course of the last century the relative values of gold and silver did not vary very materially till the year 1794, when gold became so much scarcer than usual, in comparison with silver, that the market value of the two became seriously different from the mint value, and the price of gold rose to eighty-four shillings in silver, that is, the bank could not purchase an ounce of gold with a less amount of silver than could be coined into eighty-four shillings. While, therefore, gold bullion was purchased with silver, the words market price and mint price bore their usual meaning of purchasing one commodity with another, and the attempt to *fix* the market price of gold was just as absurd as an attempt to fix the market price of corn, or anything else.

19. When gold was first coined into money, the

silver penny was the only legal standard, and the relative value of a pound of silver and of gold being supposed to be ascertained, it was determined to have gold coins representing a certain number of shillings, and accordingly the weight of bullion put into a gold coin, was conformable to the supposed market value of the two metals. This weight was altered several times, as we have seen in the table subjoined to Chapter III., and the last time it was altered was in 1717, when the pound of gold was coined in 44½ pieces of the value of 21s. each, at the relative value of the metals in those days. Since that time first custom, and then law, substituted gold instead of silver as the legal measure of value, and instead of altering the weight of the gold coin to make it conform to its market value in silver, it was determined to adhere to the weight of the gold coin as then existing, and make that weight of gold, the standard unit of value. Now, if 44½ pieces of the value of twenty-one shillings were coined out of the pound of gold, that is equivalent to £46 14s. 6d. in pieces of twenty shillings. At the great re-coinage in 1816, it was determined to coin pieces of twenty shillings instead of twenty-one shillings, and it was enacted that the pound of gold should be coined into 46 equal parts with a piece over, equal to 14½ twentieth parts of one of these equal parts.

20. As the weight of every coin must be fixed by law, it is just the same thing to say, that a given weight of bullion must be coined into a certain number of pieces; now by law a pound weight of bullion is coined into pieces of equal weight, and each of these is called a pound or sovereign, and for the convenience of account each sovereign is divided into twenty parts, which are called shillings, but as it would not be convenient to coin these shillings in gold, as they would be so very minute as to

be troublesome, coins in silver are struck to represent them.

21. In speaking of the value of articles, the more valuable it is, the smaller is the unit generally used in estimating it. Thus we reckon the price of coals by the *ton*, of corn by the *quarter* or *bushel*, of tea and sugar by the *pound*, and in articles so valuable as gold and silver, we do not use a unit even so large as the pound. If it were usual to do so, the confusion respecting the term Mint price of gold would not have arisen; the unit of value of gold and silver is the *ounce*, and diamonds and other precious stones, are reckoned by the *carat*. The price of gold is reckoned by the ounce. Now as a pound of gold is coined into £46 and $14\frac{1}{2}$ twentieth parts of a pound which are called shillings, we may say, that the price of a pound of gold is £46 14s. 6d., and the price of an ounce of gold is one twelfth part of that sum, or £3 17s. $10\frac{1}{2}$d. The simple meaning of this is, that the law directs that out of every ounce of gold, there shall be coined three pieces of equal weight, in such a manner, that there shall remain over a quantity equal in weight to 17 twentieth parts, and $10\frac{1}{2}$ two hundred and fortieth parts, of one of those three pieces.

22. In the expression that the Mint price of gold is £3 17s. $10\frac{1}{2}$d. per ounce, we see that the 17 does not mean 17 shillings in *silver;* but only 17 twentieth parts of a gold sovereign or pound. Taking bullion to the Mint and selling it there, is nothing more than exchanging a certain quantity of uncoined metal for a similar amount of coined metal; and supposing that no charge is made for the workmanship of coining it, it is perfectly clear that a certain quantity of the metal in one form, can never differ in value from the same quantity in another form,—it is absurd on the face of it, to suppose that the value of gold

in coin can ever differ from the value of gold in bullion, *so long as the coins contain their full legal weight*, and there are no extraneous circumstances, which render it desirable for the owner of the metal to have it in one form rather than the other, and there are no obstacles to prevent him from converting it from one form into the other at pleasure.

23. Under the old state of the law, which made it illegal to export or melt the coin of the country, if bullion was wanted for exportation, the value of the metal in coin might often be diminished to the holder of it, simply from the obstructive nature of the law, that is, bullion might become slightly more valuable than coin, or the market price of bullion would rise above the Mint price, and it would do so in a certain proportion to cover the risk of breaking the law; but in the present day, when these barbarous ideas are happily exploded, and it is lawful to melt or export coin as freely as bullion, it is clear that no diminution in the value of the coin, or rise in the market price of bullion above its Mint price can take place on that account, and as any one may exchange his bullion for coin at a moment's notice, by simply going to the Bank of England and demanding notes for it, it is quite clear that there can be no difference between the Mint and the market price of gold, as long as the coin contains the quantity of metal it professes to do. It would be absurd to suppose, that any one would give 48 sovereigns for a quantity of bullion, that they could only have coined into £46 14s. 6d., if those 48 sovereigns were of their full nominal weight. Now, a pound of gold bullion must always be equal in value to a pound of gold bullion; but it does not always follow, that £46 14s. 6d. of coins will always contain their full legal weight of metal; in fact we know, that after a certain time, in the

ordinary course of things, they will not do so; and when the current gold coin falls to a discount as compared with bullion, or if the same thing be expressed in other words, if the market price of gold exceeds the Mint price, it is an infallible sign that this depreciation in the coinage has taken place, and the difference between the Mint and the market price is the exact amount of the depreciation.

24. The simple meaning of this is, that we know that in one form the value or weight of the metal cannot vary; in the other we know not only that it can, but is extremely liable to do so, and requires great attention to be paid to it to prevent it from so doing. Now, under a system of law which imposes no obstruction to the conversion of the metal from one form into another, nor imposes any mercantile disadvantage on the metal in one shape, rather than in the other, there can manifestly be no difference, as long as the coins are of full weight,—as soon as there is any difference, as it can only arise in one of the quantities, we know that it *has* arisen, and we are able to detect its amount. It is clearly to be understood that when we speak of the mint price of gold bullion, we speak of its price when paid in *gold* coin or what professes to represent *gold* coin, namely, bank notes; and when we speak of silver bullion, it means the price paid in *silver* coin. Thus, in the reign of William III. the mint price of silver was 5s. 2d. per oz., which meant that the law at that time ordered that an ounce standard of silver should be coined into sixty-two shillings, but the silver coin was very much worn, and the market price of silver rose to 6s. 3d., the plain meaning of which was, that in the silver coin then generally current, there was only as much silver in six shillings and three pence as there ought to have been in five shillings and two pence. The difference between 5s. 2d. and 6s. 3d. was evidently the

measure of the depreciation of the silver coinage, which was rather more than 20 per cent. The great recoinage of the silver by Lord Halifax, restored the coinage to its par value, or the market price became the same as the mint price.

25. As the mint price of gold means the value of it expressed in *gold* coin, and the mint price of silver means the value of it expressed in *silver* coin, it is quite clear that it can make no difference in the market price of gold, whether gold be very abundant or very scarce. If the law requires an ounce of gold to be coined into £3 17s. 10½d., so long as the coin contains its full legal weight, it can make no difference in the market price, whether gold becomes as plentiful as iron, or as scarce as diamonds. The value of gold may vary with respect to other things, it may purchase more or less bread, or meat, or clothes, at one time than another; but it is absolutely impossible that its value in bullion can ever differ from its value in coin. Those who say that an ounce of gold can be more or less valuable in bullion than in coin, maintain that things that are equal to the same are *not* equal to each other.

26. The mint price of gold therefore, in its modern meaning, is nothing more than a public declaration of the weight of metal the law requires to be in the coin, which accidental circumstances have caused to be considered as the legal measure of value in this country; and an alteration of the mint price of gold would be simply an alteration in the standard weight of the coin, and would be the same thing in principle as an alteration of the standard yard measure. Those persons who ridicule the idea of having the mint price of gold fixed, should, if they be consistent, also ridicule the idea of having the standard yard measure fixed. Those who wish to let the mint price of gold

follow the market price, should also contend that every tradesman should have his yard measure of as many inches as he pleases, because when the market price of gold rises above the mint price, it is precisely analogous to curtailing so many inches of the yard. This fraudulent curtailment of the measure of value has never been done since parliament has had the chief power in the legislature. But it was constantly done in former times when the Crown was more despotic than it is now, so that the pound in the present day is curtailed of two-thirds of what it was in William I.'s time.

27. An alteration of the standard is a direct fraud upon debtors or creditors, according as it is raised or lowered; because the essence of every contract is, that the debtor is to pay a certain weight of gold, and not so many abstract ideas which are called pounds. Hence, if while any contract is incomplete, an alteration takes place in the weight of the coins, if when it is fulfilled the debtor only looks to the number of the pieces neglecting their weight, it is evidently a fraud upon the creditor. Suppose a cloth manufacturer were under contract to deliver so many yards of cloth, and before the delivery took place, the law was to reduce the yard measure to 30 inches, surely the purchaser of the cloth would not be satisfied with receiving the same number of these diminished yards, simply because they were called "yards," as he bargained for. On the contrary, he bargained for a certain definite *length* of cloth, and if when the law diminished the yard to 30 inches, it also declared that the cloth manufacturer had fulfilled his contract when he had delivered so many yards of this curtailed measure, it would be clearly a fraud upon the purchaser.

28. It is clear, however, that this fraud and injustice would only extend to existing contracts. If the law

were to reduce the yard in that manner, all contracts made subsequently to that law would adapt themselves to it, and the injustice would be just the more severe in proportion to the number and amount of contracts existing when the change took place. But suppose that while the legal yard continued to be 36 inches, from the inattention of government to send round proper inspectors of measures, tradesmen had become so fraudulent as to cut off gradually several inches from their yard measure, and suppose that this was done so openly and universally that numerous contracts were entered into, in these measures which were known by both parties to be below their legal length, so that contracts were subsisting that were made both in the proper measure and in the diminished measure. Now, suppose that the government being suddenly roused from its inattention, determined to enforce the legal length of the yard measure, it might become a question of some perplexity to decide whether equity would be more satisfied by enforceing a general return to the original legal standard, or by lowering the legal standard to the average length of the yard in use.

29. From the preceding considerations it evidently follows that the Mint price of bullion regulates the foreign exchanges, at least with those countries where an absolute standard of weight and purity is preserved. Though with those countries which have a mixed currency, liable to deterioration like our own, the state of their currency compared to our own modifies the exchange. If the market price rises above the Mint price, it must be immediately followed by a fall in the foreign exchanges, for the very same reason, because if the coin be diminished in weight, it will not purchase the amount of bullion it ought to do either at home or abroad; and it is also clear that

an alteration in the Mint price will be necessarily followed by a corresponding change in the par of exchange with every other country.

30. We may add a further illustration. Suppose a bank to issue notes, which of course promise to pay the bearer gold on demand. While the bank is in good credit, these notes will pass at their full value, but if the public have doubts of the solvency of the bank, they will either return them immediately for payment to the bank, or they would only receive them for part of the value they professed to represent. They would become depreciated or fall to a discount, and that depreciation or discount would be measured by the difference between the nominal and the current value of the notes. It is just the same with the coin. The note promises to pay so many gold coins; the gold coin purports to contain a certain amount of gold. The market value of the note is the test of its depreciation, the market value of the coin, or its power of purchasing the legal amount of bullion, is the test of its depreciation, and the difference between the market value and the nominal value is in each case the measure of the depreciation. The words on the note are the guarantee of the banker that the holder of it can get the specified amount of coin at will, the stamp on the coin is the guarantee of the state that it contains a certain weight of gold bullion. When the paper currency does not pass at its full value, it is said to fall to a discount, so when the gold coinage will not purchase its full value in bullion it has fallen to a discount.

31. We see then under the system of free trade in coin and bullion that we enjoy, it is in fact bringing the foreign exchanges home to our own door, and it is a more delicate test of the state of the coinage than the foreign exchanges, because it is far more quick in its action, and

the distance of place, and the time and expence required for the transport of bullion from one country to another, always permit oscillations of a certain magnitude to occur without a remedy, whereas the test of the price of bullion always acts instantaneously. We may therefore recapitulate the principles which the foregoing observations are intended to demonstrate. That so long as the coin maintains its full weight and purity the value of coin and bullion must be identical, and if any cause arises to diminish or enhance the value of bullion, the value of coin must fall or rise with it; and if any difference arises between the two it must be from a depreciation of the coinage. That an alteration of the Mint price of gold means an alteration in the weight of the coin, and that the supposition that the value of gold in reference to any other commodity than itself is indicated by the expression "Mint price," or affected by the Mint price being fixed, is an error arising from a misapprehension of the expression Mint price.

32. So long as the market price of gold or silver exceeds the Mint price, it is evident that if any amount of bullion be converted into coin its value will be diminished in the same proportion, and no one will convert bullion into coin. During the degraded state of the coinage during the last century, the market price of silver always considerably exceeded the Mint price, and we find it stated in the second Report of the Lords' Committee of Secrecy in 1797, p. 257, "But as the Mint price of silver bullion has been during nearly the whole of the present century, considerably less than the market price of this precious metal, the silver bullion imported could not be converted into coin, but having left a quantity sufficient for the use of our manufacturers, must have again been exported, and did not contribute in the smallest degree to augment the coin of this kingdom."

33. Gold coin can never be more valuable than bullion, unless it were to contain a greater amount of metal than it professed to do, except by a sum which represented the interest due for the time a private person had to wait while it was being coined. If coin were more valuable than bullion every one who had bullion would immediately bring it to be coined, or demand notes for it.

34. If while the Bank of England were subject to their present law of being compellable to pay notes in exchange for bullion, at their present rate, the market price of bullion were to rise above the Mint price, it would in a short time be fatal to the Bank; for while their notes which represent coin would only buy a diminished quantity of bullion, they would be compellable to pay full weight for them, a process which would evidently exhaust their bullion, for nobody would be content to have a bank note in his possession which would only pass for 15s. in the open market, when he could compel the bank to give him 20s. for it. Such a state of things would therefore necessarily cause a run upon the Bank, which would not stop while any of its notes remained out, or until the value of the note was restored to par. It was such a state of things, which we shall see compelled the Bank to stop payment in 1697, three years after it was founded. The bank received all the worn and clipped coins at their full nominal value, and gave their notes in exchange for them, when the new coinage came out, they were called upon to pay these notes in the new coinage, which of course produced a great demand upon them, which compelled them to stop.

35. During Sir Robert Peel's administration, in 1844, the currency was beginning to exhibit symptoms of depreciation from its wear and tear. Owing to the effective measures taken by him, it is now almost univer-

sally of full weight, and the deficiency in most cases is so slight, that it is not observable in ordinary transactions. The Bank of England, however, warned by experience, weighs rigidly every single sovereign paid into it by its customers, and does not credit them with more than its intrinsic value as bullion. Other banks in London find it impossible to maintain the same strictness with their customers, so that if they pay the money they receive in the course of their business into their account with the Bank of England, they generally incur some loss.

36. Although when the currency is in a depreciated state the exchange will be apparently adverse with those countries which maintain their currency in its standard state, it is quite clear the exchange, as founded upon the commercial operations of the two countries, may be above, below, or at par, and it is a very simple matter to discover its true state, that is, whether it is favourable or the contrary, and the amount of its difference either way. The rate of the exchange, which arises out of the state of the currency, is called the NOMINAL EXCHANGE, the rate which arises out of the commercial relations of the country is called the REAL EXCHANGE. Thus, if we suppose that the exchange on Paris is 2521 francs for £100 in gold at the Mint price, or when the currency is at its full legal weight, then if we suppose that, in consequence of the depreciation of the currency, the market price of gold bullion to rise to £4 3s. per oz., then the market price of £100 is £106 11s. 7½d. Now suppose that the exchange on Paris is 23·80, or £100 will purchase 2380 francs in Paris. Then, £106 11s. 7½d. would be able to purchase 2536·63 francs. But as the real par at the Mint price is assumed to be 2521, it is evident that the difference between these two sums is the extent to which the real exchange is in favour of London. We can also see

the extent to which the exchange is depressed, because £100 at the above exchange will purchase 2380 francs, whereas they ought to purchase 2536·63 if they were of full weight; and the difference between these two sums shews the extent by which the nominal exchange is depressed. Hence we have the following rule. *Find the market price of the sum in London compared to the Mint or money price, multiply the market price so found by the rate of exchange, then if the result is equal to the par of exchange, the exchange is at par, and if there be a difference, the exchange is favourable or adverse according as the difference is above or below the par*, and the depression of the exchange, caused by the depreciation of the currency is the difference between the sum so expressed in the Mint and market prices, multiplied by the rate of exchange. In the excellent state in which our currency now is, the question of the nominal exchange is of little importance, but it is impossible to understand the history of the currency in former times without it.

37. We must now consider the causes that affect the real exchange, or the true commercial one, which arises out of the transactions between this and other countries. As the British Islands do not produce the precious metals to any extent worth considering, they are only to be obtained in this country by importation, and we must now consider the various sources from which they come, and the different causes that produce an influx, or efflux of them. They are to be treated in every other respect like any other foreign commodity, and are obtained by the same means as any other one that we require for domestic consumption which is not a native production.

38. The trade in bullion may be divided into two distinct branches: the one where it is carried on directly with the countries in which gold and silver are native

productions, and the other with those countries which do not produce it, but which, like our own, have no means of supplying themselves with it except by foreign commerce.

39. I. *With bullion-producing countries.* Before the late discoveries in California and Australia, the chief bullion-producing countries were Mexico and Peru. We need not specify others, because the same principle applies to them all, and to describe them all would rather belong to a work on commerce generally. British merchants have establishments, or correspondents, in these countries, to whom they consign their goods, and their agents exchange them for the bullion brought down by the natives, and which is collected in large quantities, and usually brought home by men-of-war for the sake of security. Most of the men-of-war on the Pacific and West India stations make a voyage along the coast before they return home to collect bullion from the merchants, and the captain receives a commission on the freight. In these countries bullion is treated exactly like any other commodity, such as tea, or wool, or wine, and the British goods of all kinds are exported to them for the express purpose of being exchanged for bullion to be remitted home. The limits of this exportation are precisely similar to the limits of the exportation to any other country. It is clear, that by the time the bullion reaches this country it ought to be sufficient to cover the original price of the goods, and all the charges on them on their way out, as well as the agent's commission there, the charges for freight, insurance, and commission for bringing it home, and a fair mercantile profit over and above all these expences. Unless it does that, the commerce is not profitable. If too many goods are exported to these bullion-producing countries, their

exchangeable value with bullion falls, and they will not purchase a sufficient quantity of bullion to afford this profit, and the further exportation of such goods to these markets must be discontinued until the goods first sent out are consumed and fresh ones required. The purchase of bullion, then, in these countries, is a very simple affair, and requires no further notice.

40. II. *With countries which do not produce bullion.* The causes which produce an influx, or efflux, of bullion between this and other countries like it, which do not produce bullion, are much more intricate, and have excited long and keen controversies. Taking this country as the centre, we may consider the transmission of bullion to or from it to be influenced chiefly by the following causes: 1. The balance of payments to be made to or by it. 2. By the state of the foreign exchanges. 3. By the state of the currency. 4. By remittances made to this country, as the commercial centre of Europe, to meet payments due to other countries. 5. By the political security of this and neighbouring countries. 6. By the state of the money market, or the rate of interest in this country. 7. By the free, or prohibitive, commercial tariffs of this and foreign countries, as they permit, or forbid, our manufactures to be imported into them.

41. We have already shewn that a degraded state of the currency has the inevitable effect of driving away bullion from here. As we may fairly hope that our currency will never again be allowed to fall into such a disgraceful condition as it was till 1816, we may consider that this cause is not likely to operate again on the bullion market; and we may now proceed to develop the system of the FOREIGN EXCHANGES.

42. According to the crude ideas that were gene-

rally received about a century ago, gold and silver were almost universally considered to be nearly the only species of wealth, and it was considered to be the true policy of every country to encourage, by every means in its power, the influx of bullion, and to discourage its export; and most, if not all, of the European nations have gone so far, at one time or another, as to prohibit its export. The profit of foreign commerce was estimated solely by the quantity of gold and silver it brought into the country; and the theory of commerce seemed to be reduced to a general scramble among all nations, to see which could draw to itself most gold and silver from the others. According to this theory, the gain of one party was the loss of the other; every article produced in another country, and imported into this one, was considered to be a direct loss to the country. This was what was called the mercantile or commercial system. According to this theory, the leading maxim which governed the legislature was, to make the exports to exceed the imports; and the conclusion drawn was, that the difference, or balance, must be paid for in cash by the debtor nation. When two nations traded with one another, the difference of debts between them was called the "balance of trade," and when this was in favor of England, the exchange was said to be favourable, because bullion had to be paid to her; on the contrary, when, on the result of trade, payments had to be made by her, the balance of trade was said to be against her, and the exchange unfavourable, and then gold was sent out of the country. According to this theory, the prosperity, or the contrary, of the country, and the profit, or loss, of foreign commerce was exactly measured, according as gold had to be received or paid, or as the exchange was favourable or the reverse.

43. The admirable chapter of Adam Smith on the Principle of the Mercantile System is a masterly exposition of the fallacy of this theory, and is certainly one of the soundest and best written in his whole work, from the more than usual consistency of its ideas, and the lucidity of its style. There are, however, some things relating to the subject which require further enforcement and illustration.

44. So far from the principle of the mercantile theory being true, that gold and silver are the most profitable and desirable object of import, the direct reverse is unquestionably true, that gold and silver are of all objects of commerce the most unprofitable; and it is a certain axiom of commerce in a state of freedom, *that bullion will not be imported until it has become unprofitable to import any other article.* There are no class of traders who derive so little profit, in proportion to the capital invested in their business, as dealers in bullion and money of all sorts, whether they be bullion merchants or bankers. Although the opinions we have alluded to above were the prevalent ideas of the age, there were not wanting a few sagacious thinkers, who discovered the truth of what we have last said, and maintained the unprofitable nature of gold and silver; but, like others who are before their age, their voice was unheeded, and the general object of commercial ambition and legislation was to accumulate treasures of gold and silver.

45. There is no expression in commerce of more frequent occurrence than the "balance of trade;" and it may be as well to give the interpretation of it generally received during the last century, and which is not yet wholly extinguished. "The common mode of considering that question has been to set off the value of the

imports, as stated in the public accounts, against the value of the exports, and the difference between the one and the other has been considered the measure of the increase or decrease of the national profit."* And Mr. Hoare, a banker of eminence for twenty-two years, said, "I consider the only proper means of bringing gold and silver into this country to arise from the surplus of our exports over our imports, and that ratio or proportion which is not imported in goods must be paid for in bullion. In the year 1796, the imports of this country appear to be £19,788,923, and the exports appear to be £33,454,583, which ought to have brought to this country bullion to the amount of that difference, or £10,665,660."†

46. We have made these extracts because they convey, in the fewest words possible, the whole ideas on the subject, and they are made by persons of great commercial eminence before the Committee of the House of Commons. It is true that Mr. Irving, who was Inspector-General of the Exports and Imports of Great Britain and the British Colonies, expressly states that the application of this principle to the whole of the British trade would, in his judgment, be extremely erroneous. We, therefore, do not bring him forward as *approving* of the theory; but only as stating distinctly and authoritatively what it was. But Mr. Hoare, a banker of eminence and long experience, adopted it; and we believe that this theory of the balance of trade still retains a hold on the minds of great numbers of persons, who do not give themselves the trouble to sift it thoroughly. Nevertheless, there never existed a more complete chimera and pernicious

* Mr. Irving, Inspector-General of Imports and Exports. Evidence before Commons Committee of Secrecy, 1797. 3rd Report, p. 111.

† *Ibid.* P. 83.

delusion than this said doctrine of the balance of trade, nor one which has exercised so disastrous an influence on commercial legislation.

47. It appears that the simplest way of arriving at an accurate conclusion on the subject, is, to consider that the dealings between nation and nation are only made up of the aggregate of dealings between individuals of the nations, and we have only to consider the variety of methods in which an individual merchant may trade, to have an accurate and comprehensive idea of the commerce of the nation. Instead of dealing with figures of vast amount, which make no definite impression on the mind, and which are produced by a number of complex causes, we shall now proceed to consider in how many different ways an individual merchant may trade with foreign countries, and we shall shew, by considering the dealings of an individual, how utterly erroneous it is to suppose that an influx of bullion is, *ipso facto*, a proof that commerce is flourishing and profitable to the country, and that whether it is so or not depends very much as to where it comes from, as well as a number of other circumstances.

48. With respect to those countries in which bullion is a native production, and to which we trade for the express purpose of obtaining it, we have already shown that unless the quantity obtained in exchange for our goods exceeds a certain amount, the commerce is not a profitable one, and that the simple fact of bullion being remitted from them, and therefore, though the exchanges with them must always be in our favor, it is no proof whatever of prosperity or profit.

49. Next, with respect to countries which do not produce bullion, it is easy to shew the extreme fallacy of the opinion that our exports should exceed our imports

and that the *difference* will be the *profit* of the country, in many cases the precise converse is true, that our imports should exceed our exports, and the profits are measured by the exact sum by which the imports exceed the exports, or the excess of what we receive over what we give.

50. To prove this, let us take a simple case. Suppose a merchant in London sends out £1,000 of goods to Bordeaux, by the time they arrive there, the mere addition of freight, insurance, and other charges, will probably have increased their cost of production, or the expense of placing them where they are, to £1,050, supposing them to be sold without any profit at all. But, as the merchant would never have sent them to that market unless he expected to realize a good profit, we may assume that the market is favorable, and that they sell for £1,500, and he would probably draw against his agent for £1,200. His correspondent at Bordeaux instead of remitting the money to England, would find it far more profitable to invest the proceeds of the goods in some native production, which would fetch a good price in England. The chief native production of that country is *wine*, so the agent would invest the proceeds of the goods, after deducting all charges for freight, commission, &c., in Bordeaux wine, and send it to England. This wine would probably be sold at a considerable profit in the English market, say it would fetch £2,000, and after deducting all the charges of every description, on the cargoes both ways, the difference would be the merchant's profits. In this case it is quite clear that no bullion would pass between the countries, and the merchant would apparently import more than he exported, and it is also clear that his profits are exactly estimated by the excess of the value of the inward cargo above that of the

outward one, after deducting all the charges both ways, and just as this difference is the greater so his gain is greater. In this case as no bullion would pass from either country to the other, there would be no question of exchanges.

51. It is clear that the London merchant's agent at Bordeaux, would be governed by several considerations as to whether he would remit specie or wine to London, and he would be chiefly governed by the state of the wine markets, both at Bordeaux and London. For, supposing the goods to be sold at a good profit at Bordeaux, he must next consider the price of the wine at Bordeaux, and also what it might be expected to fetch in London. If some great disaster had happened to the wines so that there was a failure of the crops, the price of wine at Bordeaux might rule excessively high, but at the same time there might be a large stock of wine in London, and the price might not be unusually high; so that if he were to purchase wine at Bordeaux, and send it to London, it might be a loss. In such a case as this, if there were no other native production to send, he would find it most advantageous to remit specie, whatever he could sell the goods for, and then the exchange would be in favor of London; but before the London merchant could reckon his profits he would have to deduct the freight, insurance, &c., on the specie.

52. Whether the transaction was profitable or not to the London merchant would entirely depend on the amount of specie he received after deducting all charges, and if he had purchased the goods he sent out from England cheap, and there was a scarcity of them at Bordeaux, he might realize high prices there, which might leave him a good profit. It would be very improbable that he could realize so much profit on that single

operation, as in the double one of exporting goods and importing wine. So that the import of the specie would be less profitable to him and the nation at large, than the import of the wine.

53. The reasons which caused the export of specie from Bordeaux, and the import of it into England, in this case are very plain, they were the scarcity and dearness of the native productions at Bordeaux, and the abundant supply of them already in the London market. Hence, we gather that the scarcity and dearness of native productions is an infallible cause of the export of specie from a country, on the contrary, an already existing abundant supply of foreign productions of all sorts, is a certain cause of its import into a country. On the contrary, when native productions are cheap and abundant, it will cause an importation of bullion, and when foreign productions are scarce and dear, it will cause an export of bullion.

54. We have before observed, that the exchange being in favor of a country, means nothing more than that bullion has to be remitted to it, in the case above described, the exchange at Bordeaux would be in favor of London; but this simple case is as good as a thousand to shew the extreme and dangerous fallacy of drawing any conclusion, as to the advantage of the trade to England, from the simple fact of the exchange being favorable to her, and an influx of bullion taking place.

55. The example given above is of the simplest description, and a merchant of eminence, who had correspondents in several different parts of the world, might easily multiply these operations, so as to visit many markets before the returns of his cargo were brought home. Thus, instead of having the wine sent home from Bordeaux, his correspondent might find it more profitable to

send it to Buenos Ayres, and dispose of it there. The chief native production of that place is hides, and we may suppose that his correspondent there, might invest the proceeds of the cargo of wine in hides, which there might be a favorable opportunity of selling in the West Indies. When the cargo arrived in the West Indies, instead of remitting the proceeds directly home, it might very well happen that owing to a scarcity of corn at home, it might be very high there, and cheap in Canada, so he would invest the proceeds of the hides in sugar, and despatch that to Canada, where the merchant's correspondent there would dispose of it, and purchase corn, which he would send to England.

56. In the case just described, we observe that there are five distinct operations, and as we may suppose that there is a profit upon each of them, by the time the returns for the goods, which originally cost £1000, are brought to England, it may very well be, that the corn which forms the ultimate payment of them, may be several times as valuable as the original cargo; and as we have supposed the charges on each operation to be deducted before investing the proceeds in other articles, it is clear that the merchant's profit upon the whole, are exactly the difference in value in England, between the articles last purchased and sent home, and the original cargo, after deducting all the expences of sending home the last cargo, and we also observe that no specie has been sent from one country to the other in the whole course of the extended operation.

57. This example is sufficient to demonstrate the utter fallacy of the old idea, which is even yet not extinguished, of the balance of trade. Nothing can be more clear, that unless the value of the cargo which comes into England, in payment of the cargo that was sent out, is

sufficient not only to defray the cost of the original cargo, as well as all charges upon it and the return cargo, and leave a profit besides, the commerce could not be carried on. No English merchant could export goods, unless he received in return others of much greater value, and the obvious consideration that the more he gets for what he sends out, the more profitable it is to himself and the nation, is sufficient by itself to explode the old fallacy of the balance of trade. One obvious source of error is, that the value of the exports from this country is estimated at the time of their leaving the country, and before the charges for freight, &c., are incurred, which must necessarily raise their selling price in the foreign market, if they are not sold at a loss, and their value in that market is expected to be considerably higher than that. On the other hand the value of the imports is estimated, not according to their value when they left the foreign country, but what it is upon their arrival here, including all the charges upon them.

58. If we suppose that Bordeaux had but one native production—wine, the chances of finding the markets both at Bordeaux and London in a favourable state for importing produce instead of specie, would be limited to that single article. But if it had other products, such as olive oil, the chances would be increased of finding articles to suit the market, and the chances would evidently be multiplied according to the number and variety of its productions.

59. Let us take another example, and let New York be the starting place. The staple productions of America are breadstuffs and provisions. A merchant of New York sends a cargo of corn to Liverpool, and his correspondent there will endeavour to invest the proceeds of that in British goods if he finds the state of the markets in

England and New York will make such an operation profitable. Suppose that the price of corn is very high here, and British goods are also very high here, and very low in America, it is clear that nothing but specie will be sent. In cases when a great and unexpected dearth of corn occurs in England, and its price rises enormously high, the infallible result is to cause a great drain of specie for the time being, because our necessity for food, is much more pressing and immediate than their necessity or capability of consuming our cotton or woollen goods. And the only way to arrest such a drain, is to effect such a reduction in the prices of British goods as shall make it more profitable to export goods than specie.

60. In the cases we have been hitherto considering, we have described the operations as if merchants were left perfectly free to carry their goods whither they pleased, and were not met and obstructed by artificial obstacles purposely devised for interfering with their business, by the laws of different nations. But there are few nations, and our own among the rest, which have not habitually discouraged the importation of foreign goods, and imposed heavy duties for the specific purpose of excluding them, as they conceived the extraordinary idea that all foreign goods brought into the country were so much loss to it. Thus the statute of William III. (1688, c. 34), says:— "It hath been found by long experience that the importing of French commodities of all sorts," (enumerating them) "hath much exhausted the treasure of this nation, lessened the value of the native commodities and the manufactures thereof, and greatly *impoverished* the English artificers and handicrafts, and caused great *detriment* to the kingdom in general." If we consider the effect of these laws in one place, it will equally apply to every

other; thus, in the first instance, suppose that there are very high protecting duties at Bordeaux against British goods, as the consumer must ultimately pay all the expences and charges on the goods, it will have the effect of greatly raising the market price there, and diminishing the number of persons who can afford to buy them, and hence, as the market is so limited, a smaller quantity of goods will overstock it than if it were much extended. This will cause a much less quantity of goods to be sent from London, and it will cause a much larger proportion of specie to be remitted to pay for the productions of Bordeaux. This example shows that the inevitable effect of high protecting duties between country and country is to cause a much more frequent transmission of bullion from one to the other than would be the case in an unfettered state of commerce; unless, indeed, the smuggler steps in, who is the corrector provided by nature against this commercial insanity. The effect, then, of prohibitive duties is to cause an influx of bullion; but we must carefully guard against supposing that this influx is a favorable sign, as it is certainly the least profitable import a merchant can receive for his goods; and there is this very marked difference between an influx of bullion under the Protectionist system and under a Free-trade system, that the former is accompanied with a great dearth of foreign commodities, but the latter is an infallible sign of a great abundance of them, as bullion is never imported when men are allowed to follow their own interests, until our markets are already so overstocked that every other article has ceased to be profitable.

61. The foregoing cases comprehend the different varieties of commercial transactions between this and any other country, and we gather from them the following results respecting the influx or efflux of bullion:—

I. The cause of bullion being imported is either when the price of goods is so *low* in England, and so *high* in the foreign market, as to tempt foreigners to send here to buy goods, or the price of goods is so high in the foreign market and so low in England, that nothing but specie can be sent in payment of goods exported from England.

II. The cause of bullion being exported from England is that there is some great and pressing demand for some article in this country, and other commodities are so scarce and dear that they cannot be exported with a profit, or that the article is required in such great quantities that the foreigner cannot consume our goods which we should prefer to send in payment fast enough, and so specie must be sent, and the greater the difference in price the greater will be the drain of bullion; or that other markets are already overstocked with our productions, which are depressed below their usual market value there. This is what is meant by overtrading, and from this circumstance we see that overtrading is a sure precursor of a drain of bullion from the country. When there has been a great failure in the crops in this country, so as to cause a famine price, the demand for corn is so immediate and urgent, that it necessarily causes a great drain of specie, and it is then of the greatest possible consequence, that the prices of other commodities should be as low as possible, to enable them to be sent in payment of the necessary supplies of food, and prevent such a drain of bullion as may disturb the whole monetary system of the country.

62. Overtrading, and a failure of the cereal crops of this country, are each of them sure causes of a drain of bullion. The most disastrous event for the commerce of this country is when both these circumstances happen

concurrently. It is like a spring tide of disaster. The most terribly disastrous commercial crisis this country ever experienced was preceded by some years of over-trading, followed by successive failures in the staple support of the people of England and Ireland. These two adverse events together produced the calamities of 1847. We shall see that the intended effect of the Bank Act of 1844 is to provide a remedy for such a state of things, by causing such a reduction in the price of home commodities, in the event of a drain of specie taking place as to render it more profitable to export them than bullion, and so stop the drain. Whether the act is effective for this purpose is another question, which it is not the proper place to discuss here.

63. There are some countries from which we draw articles of great necessity, but to which, from different circumstances, we do not expect to remit goods in payment. Russia was the great source of our supply of hemp, tallow, flax, and we used to import these products to the value of £12,000,000 yearly, but owing to the prohibitive character of her tariff, we were unable to send our own productions in payment of these goods to anything like a similar amount in value. To such a country the difference must be remitted in cash, to the mutual loss of both parties, and unless there were other means of equalizing the exchanges with different countries, the exchange with Russia would always be unfavorable to England. The chief export trade from Ireland to England was in articles of food—pigs, cattle, oats, butter. Great quantities of these came from Ireland, but the inhabitants of that country were much too poor to be able to consume an equivalent amount of English goods, in consequence of which the difference had to be remitted in specie, and so the exchanges between England and Ireland were

almost uniformly favorable to Ireland.* Now, if Ireland had been sufficiently wealthy to have consumed English goods instead of specie, it is evident that it would have been far more advantageous for both countries; for English industry would have been promoted, and Ireland would have gained a more valuable import. These two examples offer a further illustration of what we said before, that the frequent transmission of bullion between countries which do not produce it is a symptom of a less profitable trade than it would be if goods were transmitted.

64. In the operation first described above, we have supposed it to originate with the English merchant who remits his goods to his correspondent abroad, and who reaps the profits, and the proceeds must be remitted to him after deducting the freight, charges, and commission, of the agent there. But it is also probable that there will be native merchants at Bordeaux, who will send wine to England on their own account, to their correspondent here, and then the whole transaction will be reversed. The English correspondent will endeavour to purchase English goods as low as he can, and if he can get them low enough to realize a profit in the Bordeaux market, he will send goods out, but if the English goods are too high for that purpose, he must send specie. It is also evident that even if the goods be at no unusual height in England, still if the market at Bordeaux be already overstocked with them, or as it is called "glutted," it would be useless to send more goods, to force the price down still further, and the consequence must be that nothing but specie will go.

65. From this we see that if specie be coming in from a country, it is a proof that we have already got so many of their goods, that it will not pay to import any more,

* *Vide* Report of House of Commons on Irish Currency. 1804.

and if specie be going out to a country, it shews that we have already sent out so many of our goods to that market that it is already overstocked. The different barbarous laws which every country has enacted under the erroneous appellation of protection, by aggravating the price, limit the markets in every country for the productions of other countries, and cause much fewer commodities to pass between nations than otherwise would, and the markets of any country to be much sooner overstocked than they would otherwise be. By preventing this interchange of commodities which every nation would naturally prefer, it necessitates payments in specie to a much larger extent than would be the case if commerce were free, to the common impoverishment of all parties.

66. The foregoing considerations shew that it is possible to carry on any amount of foreign trade without the necessity of any remittances being made in specie. In the instance above taken, the English merchant purchases goods and sends them to his correspondent abroad, who realizes them and invests the proceeds in that market, and sends them to England, and the English merchant disposes of them in England, and gains the profits there, and no specie is sent from one country to the other. Similarly the foreign merchant sends his goods to his correspondent in England, who disposes of them there, and invests the proceeds of them in England in English commodities, and sends them to his foreign correspondent, who gains his profit, either by selling them in his own country, or by sending them to some other market where he may make a higher return, and as in the former case, no specie passes between the two. Nor is the result in any way different, if the trade be conducted by the more circuitous method of three or more transactions. Hence,

in a healthy state of the markets of different countries, scarcely any specie will pass between them, and the very fact of there being a necessity for making frequent and large remittances of specie from one country to another, is in itself a proof of there being something irregular and unhealthy in the state of commerce in general, and in the state of the markets of one country or the other, either that they are overstocked or understocked, or that there is some legislative interference with the natural course of trade between nation and nation. Nothing can be more certain than that bullion is the least profitable of any article of commerce, except from bullion-producing countries, and that when merchants have recourse to it, it is because some disturbance has taken place in the profitable relations between supply and demand of other commodities.

67. Now, supposing commerce to be in that desirable and healthy state in which no specie passes between non-bullion-producing countries, who could tell how what is commonly called the "balance of trade" inclined? Who can tell what the balance of trade is? Each country would shew a favourable balance, taking the values of the exports and the imports at their market prices in each country. Each country would shew that their imports exceeded their exports in value, that is, each would shew that they had gained by their commerce, for the very simple reason that the value of the article they received would be greater in their own market than the value of the one they gave; and unless it was so it is manifest that trade could not be carried on, because all the expenses and profits of trade are provided for by the difference in value between what they give and what they receive. Hence, unless both parties gain by the transaction, commerce cannot be carried on. But

this shews that the expression of the "balance of trade" is a gigantic delusion, and it is greatly to be wished that it should be for ever exploded and laid aside, as the fountain and origin of incalculable mischief to the world, in the suicidal efforts every nation has made to secure to itself that great chimera—a favourable balance.

68. The mistake of unreflecting writers, who think that the price of foreign goods sold in this country goes into the pocket of the foreigner, consists in this, that the probability is that the English merchant who imports these goods has already purchased them with English goods, so that their money price goes into the pocket of the English merchant, and not that of the foreign one, and is, probably, re-invested in English goods if there is a prospect of a favourable opening for them.

69. The fundamental fallacy about the balance of trade which seems to have taken possession of the legislature, was, that the interests of the State were different and opposite to the interests of individuals. They seem to have entertained the idea that every merchant had entered into a conspiracy to ruin the country, which he tried to carry into effect by becoming as prosperous himself as he could. It seems most unaccountable how long they missed the obvious truism, that the prosperity of the State was made up of the prosperity of the individuals composing it, and that every one was far keener in discerning what conduced to his own prosperity than the State could be, and that if private merchants found it to be their individual advantage to import commodities rather than bullion, it could not be beneficial to the State to force trade into a contrary direction.

70. Notwithstanding the prevalent idea that foreign trade was profitable just in proportion to the money it brought into the kingdom, and that this was indicated by

the so-called balance of trade, there were a few enlightened persons who saw through the fallacy and combated it. In reference to a certain "balance" which occurred in the trade between Holland and England, and which was a subject of much gratulation, Craik well observes,* that it would be as irrational to suppose that the English must necessarily be the chief gainers by this trade, as it would be to maintain that the productive laborer must always be a greater gainer on the article he produces than the capitalist who employs him. That the Dutch were in the position of the capitalist, and the English of the laborer, and that while the Dutch had the goods the English had the money; just as, while the master has the goods, the workman has his wages. But that the excess of profit, or real advantage, should be with the laborer rather than with the capitalist, may fairly be presumed to be as unusual, and as little likely in the nature of things, in the case of nations, as of individuals.

71. An attentive consideration of these various methods of trading will shew what a complete phantasy the old, and still too common, idea of the "balance of trade" is; and as nothing more conduces to error and confusion in any science than a nomenclature and technical phrases which are founded upon misconceptions of the principles of that science, so nothing has exercised a more malignant influence upon legislation, and popular ideas generally, than this phrase; and it would be very desirable if some means could be taken to discontinue its use altogether. But as it does occur in the course of trade that transactions between nations have to be settled in specie, we must now consider the operation of the foreign exchanges.

72. The course of the foreign exchanges, then,

* History of British Commerce. Vol. II., p. 155.

entirely depends upon the fact of persons in one country having to make payments to persons in another country, from whatever causes these payments have to be made. And there are but two causes which influence their rates: first, the depreciation of one or both of the currencies which have to be exchanged; secondly, the relative amounts of money that have to be remitted from one country to the other.

73. Between two cities, say London and Paris, whose natural intercourse was not impeded and obstructed by barbarous laws, it would probably happen that the debts of the merchants of London to those of Paris would be about equal to the debts of the merchants of Paris to those of London, in an ordinary state of commerce. Thus, if A of London is the creditor of B of Paris, and B^1 of Paris is the creditor of A^1 of London, to equal amounts; then, instead of B of Paris sending the actual money to A in London, he may go to B^1 in Paris, and pay him the money, and so purchase from him the debt due to him by A^1 in London, which he would send to A; and A, on presenting the bill to A^1, would receive the money; and so all the debts would be settled without transmitting any bullion between the two places. In such a case as this, as the full value would be given for the bill, the exchange would be said to be at par.

74. Supposing, however, that while the exchanges were in this state of equilibrium, in which the demand and supply of bills, both in London and Paris, were exactly equal, that is, that each of them would have to send and receive the same sum, it should happen that from any cause whatever, no matter what, there should be a desire on any particular day to send more money from one side than it had to receive. Let us suppose, for instance, that on any particular day London should

wish to remit to Paris £105, when it only had to receive £100, it is evident that the demand in London for bills would be £105, and the supply only £100. But as the London merchant has to provide for his debt in Paris, and the cost of transmitting the bullion falls upon him, it is evidently his interest to give a little more than the £100, in order to save this expense of transmission; and it is very evident that this limit is the cost of sending the money from one place to the other, or about 15s. Consequently, if the competition for bills increases, the price of a bill in Paris will rise to that extent; but it will not go beyond that limit, for then it becomes cheaper to send bullion. It is clear, therefore, that those who are in time to buy bills at that price will do so, and those who come too late, when all the bills are sold, must send bullion. In such a case as this, bills on Paris would be said to be at a premium. On the other hand, if similar circumstances took place at Paris, bills on London would be at a premium.

75. In this case we have supposed the demand at either place to exceed the supply, or to increase from par —but it is quite manifest that the reverse case may happen, and that the demand at either place may fall short of the supply, and then the phenomena will be reversed. For in such a case the Paris merchant wishes to *sell* his debt on the London market, in order to avoid the expense of transmitting bullion from Paris to London, but as the expense of sending that is known, it is clear that he will not sell his debt for any sum lower than the expense of sending bullion, and consequently he will not sell his debt for a lower sum than £99 5s., and the competition of merchants to sell their debts may lower the exchange to that limit, but not beyond, and those merchants who cannot get any one to purchase their debts at

that price will be obliged to send bullion to discharge them.

76. We thus see that the state of the exchanges arising out of the cross remittances of money is a simple example of the formula for prices in our second chapter, with the exception that the variation in the rates of exchanges never can exceed a certain definite sum, namely twice the cost of sending bullion from one place to the other; thus, if London be taken as the standard, the range of variation of the exchange with Paris can never exceed 30s., either 15s. above par, or 15s. below par. For if the state of demand and supply would have a tendency to cause a greater variation than that, a transmission of bullion immediately arises.

77. The exchange between the whole city of London or England and the whole city of Paris or France is simply the sum of the transactions of each individual transmitter of money, but as individuals would lose a considerable time in going about discovering what other persons had to receive remittances, or wished to transmit them, that is, those who wished to buy or sell bills, there are persons who make it their business to act as agents between the purchasers and sellers of these bills. Thus, if any London merchant has a debt to receive from Paris, he endeavours to *sell* the bill on the Stock Exchange, and if he has a debt to pay in Paris he endeavours to *buy* a bill on the Exchange. The competition between the buyers and sellers of bills will act exactly in the same way in causing their price to rise and fall as the prices of other commodities, always bearing in mind that the difference paid as a premium for bills will never exceed the cost and charges for remitting the specie itself, and when all the bills against the country which has the smallest amount of cash to send have been set off against the

bills upon that which has the largest amount to send, the difference must be sent in specie. And though any single merchant might have great difficulty in ascertaining the proper rate of exchange between two countries on any particular day, yet when all these debts and credits are brought into one great focus as the Stock Exchange, which is the great debt market of Europe, their market value is settled just in the same way as that of any other commodity.

78. When one country, say London, as the representative of England, has a sudden necessity to make purchases of a large amount in another, as, for instance, to buy corn in New York, owing to a failure of the crops in England, before New York has had the time or necessity of making an equal amount of purchases in London, it is quite evident that a greater quantity of bullion must be remitted to New York to settle accounts than *vice versâ*. Consequently bills on New York will be at a premium, and the exchange is said to be adverse to London, which means that a higher price must be paid in London for a bill on New York than it purports to represent, and if the premium rises beyond a certain amount, then bullion begins to flow out. On the other hand, if New York suddenly commissions a quantity of goods from London, before London can require an equal amount from New York, it is evident bills on New York being in excess of the demand, the price of them will fall to a discount, and the exchange is said to be in favor of England, because it requires a less sum of money in England to purchase a bill on New York than it purports to represent, and as soon as the discount exceeds the cost of transmission of bullion, it will flow in.

79. When, therefore, the exchanges are unfavourable, it shews that bullion has a tendency to leave the

country, and when they are favourable that it has a tendency to flow in, but in neither case will it actually do so, until the difference exceeds the cost of transmission of bullion.

80. When the exchanges are so adverse to England as is described in the last section but one, if the English debtors could purchase goods cheaply in England, which would sell in the New York market for the amount of their debts, they would of course prefer to send them, but if commodities are too dear in England, or too cheap in New York, from overabundance, it is clear that nothing but bullion will be sent; and bullion will continue to be sent, unless the prices of English goods can be so reduced or the price in the foreign market raised. As it is wholly out of the power of English laws to raise the prices in foreign markets, we shall see hereafter that it is one of the objects of the present banking laws of England to compel such a reduction in the prices of home goods as shall enable them to be exported instead of specie, under the circumstances we have been considering.

81. Such a state of things as this would not last for any continuance of time between two countries whose intercourse was free; and it would have a natural tendency to correct itself, because the transmission of bullion between two such places as London and New York is the least profitable species of traffic that can be. Such a violent and sudden disturbance of the usual course of exchange is usually caused by a great and sudden dearth of some article of great and pressing necessity. Thus, the terrible failures of the potato and grain crops in the United Kingdom caused a sudden, and imperative, and immediate demand of food for instant use. Such a deficiency as this would require to be satisfied far quicker than any demand that could arise for home goods, would operate

to restore the exchanges, and the payment of such quantities of corn as were required could only be made in specie. Thus, New York, which may be taken as the centre of American trade, is the great market for corn and breadstuffs. When the great failures in the British crops took place, immense importations were rendered necessary, but there could be no corresponding demand for English goods, of equal rapidity, so that it became necessary to pay immediately for the corn with specie, and not with goods. Consequently, the exchange became adverse, and bullion flowed out in great quantities.

82. This state of things, however, had a natural tendency to correct itself. The Americans having a great quantity of money poured in upon them for their corn, had a natural impulse to purchase, and in course of time they sent over large orders for English manufactures, and the necessary consequence of food being at a high price was, that manufactures were low, and so very large exports of our goods took place, larger in amount than we required to be returned in corn, and so, after some time, the Americans had to remit money for their purchases in the English market, and the exchanges again became favorable, and the specie which had been exported in payment of the corn was brought back again to England in payment of the goods, and the former state of things was restored.

83. This violent disturbance of the usual state of trade, and the abrupt oscillations of the exchanges, first one way and then the other, were unprofitable to both parties on account of the loss occasioned by the double transmission of specie. Moreover the enormous efflux of specie on several occasions caused serious alarm in the minds of statesmen of this country for the stability of our paper currency, which all purports to be payable in coin to bearer on demand, and we shall see the professed in-

tention of the Bank Act of 1844 is to enforce a diminution in the quantity of Bank of England notes in the same ratio as the specie in their coffers diminishes.

84. Some writers insist that an unfavourable state of the exchanges is an encouragement to exportation. Thus, if the exchanges between England and any place are unfavourable to England, the bills upon that place will sell at a premium in the London market, and if a merchant sends goods there, and draws bills upon the place, he can sell them at a trifling premium, and to that extent he can afford to purchase goods at a higher price than if the exchanges were more favourable. But the extent to which this can operate as an inducement to export to any particular market must be so exceedingly minute, that we much doubt that it can have any practical importance; and the terms used by some of these writers seem to be somewhat wanting in clearness, as to the cause of the state of the exchanges. Every merchant who has a debt to pay to a foreign country will always endeavour to pay that debt in goods, rather than in specie, whatever be the state of the exchanges, if the state of the prices in the two markets will let him do so at a profit, and it is the state of the prices in the two markets that governs the state of the exchanges, as we have seen in the operations previously described in this chapter. It is certainly undeniable that if a merchant can discover goods which can be profitably remitted in an unfavorable state of the exchanges, he may derive a small additional profit upon that account; but it is very small, and a small comparative increase in prices will annihilate it altogether. This small margin does undoubtedly afford a slight additional inducement to export, but it is so very minute, when at its greatest extent, that it can have no influence in any great emergency; and we have already said that

the exchanges being unfavourable at all is a proof that this limit has been passed. The fact is that the exchanges do not become unfavourable until *after* the merchants have taken all these things into their consideration. It cannot be too carefully observed, that merchants will not export specie except in the last resort. They will exhaust every other device before they come to that, and the exchanges do not become unfavourable until they find that there is no commodity which they can export to pay their debts with, and there is no question of exchanges until the necessity arises for transmitting specie. To say, then, that an unfavourable state of the exchanges makes it profitable to export, seems very like offering a cheap bargain to a man who has no money to buy. So that we may say that the state of the exchanges is the *result* of the operations of exporting and importing, and the prices of articles, and the state of the exchanges are not the *causes* of exports and imports.

85. We have seen by the preceding considerations that there are two separate circumstances that influence the figures, which denote the state of the exchanges between any two countries, at any particular time. The first is the relative intrinsic condition of the currency of each country, and secondly, the comparative remittances from whatever cause arising, that have to be made from one to the other. The first is called the NOMINAL EXCHANGE, and the second the REAL EXCHANGE. And these two causes may always operate in similar, or contrary directions, and the actual result will be a modification of the two. Now, we have endeavoured to show that the *real exchange* can never vary beyond certain limits, which are always capable of being ascertained to a very great degree of accuracy. But the first cause, or the *nominal exchange*, may vary to any extent whatever;

there is no limit to the depreciation which the national currency may undergo—as, for instance, under the issue of *assignats* by the French revolutionary government—and so the foreign exchanges may sink to any state of depression. Now, if we observe the exchanges for any continuance of time, and see that they continue depressed to a greater extent than the real exchange, which is by nature limited, will warrant, we arrive at the irresistible conclusion, which is the great axiom that connects the relations of the currency and the foreign exchanges—*That if the foreign exchanges continue depressed for any length of time beyond the limits of the real exchange*, THAT EXCESS IS THE PROOF, AND THE MEASURE, OF THE DEPRECIATION OF THE CURRENCY.

86. It is of course scarcely necessary to observe that this rule only applies to the exchanges with those countries which, like Hamburgh, Amsterdam, or Venice, always guaranteed an absolute maintenance of the legal standard, or like France, which ever since the restoration of specie payments after the abolition of the assignats, has always maintained her currency at its full weight and purity. With countries like Portugal, which allowed its currency to become depreciated, the nominal exchange with England would of course vary according to the comparative depreciation of the two currencies.

87. This principle, connecting the currency and the foreign exchanges, is evidently identical with the one we have before considered respecting the mint and market price of bullion. They both simply arise from placing the currency in a position where it will have no estimation beyond its intrinsic value as bullion, and withdrawing it from one where it is influenced by the local associations of popular opinion. The test of the home market of bullion is more satisfactory, because it is more

rapid in its action, and the differences that may arise from the advantage of having the metal in one form or the other are reduced to a much narrower limit than the real exchange between any two countries, and are not so liable to vary. But though the necessary correction to be applied is somewhat more intricate in one case than the other, the *principle* is identical; and we may now recapitulate the incontrovertible axiom on the subject in the following words:—*The rise of the market price above the mint price of gold, beyond a small quantity denoting the cost of changing the metal from one form to the other, and a fall in the foreign exchanges beyond the limits of the real exchange*, ARE THE PROOF AND THE MEASURE OF THE DEPRECIATION OF THE CURRENCY.

88. It has several times happened, that when the nominal exchange was against England, on account of the depreciation of the currency, the real exchange was in her favor. Thus, in 1694, the nominal exchange between London and Amsterdam was 25 per cent. against England on account of the depreciation of the currency; but the real exchange was in her favor, and so diminished the apparent depression.

89. Between countries in which there are no restraints upon trade, the exchanges will never vary very much, except on some sudden emergency; but there are countries with which, owing to the prohibitive laws which still infest their commercial codes, the exchanges are permanently unfavourable, because they will take nothing but bullion for their commodities. Russia is one of these countries, and hence, if not modified by other circumstances, bills upon Russia would always be at a premium; but here again the effect of trafficking steps in, which always has a tendency to equalise prices. The merchant (if we may call him so) who deals in bills, acts

upon the same principles as the dealer in any other commodities, he buys them where they are cheapest, and sells them where they are dearest. Hence, he will try to buy up Russian bills cheap in other exchanges, or debt markets, and sell them in the London debt market. On the other hand, from the course of trade between England and Italy, the debt which Italy owes to England is usually greater than the contrary; hence, Italian bills will usually be at a discount, or cheap, in the London debt market. So the bill merchant buys them up cheap here, and sends them to some other market—Paris, for instance—where they may be at a premium. By these means, the price of bills is raised where they are cheapest, and depressed where they are dearest; and the general result will be to melt all the differences between separate countries into one general result, so that the exchanges will not be favourable with one country and adverse with another, but they will be generally adverse or favorable with all the rest of the world.

90. Supposing, however, a merchant has to remit money to Paris while the exchange with Paris is unfavorable to England, he may possibly discover a more advantageous way of remitting it than by buying a bill on Paris directly. Thus, for instance, while bills on Paris are at a premium in London, those on Hamburgh may be at a discount, and bills on Paris may be at a discount in Hamburgh. So if the merchant buys a bill on Hamburgh and sends it to his agent there, and directs him to purchase a bill on Paris with the proceeds, he may be able to discharge his debt in Paris at a less sum than he would have to pay for a Paris bill in London. This circuitous way of settling his debt involves additional charges for brokerage, commission, postage, &c., but the effect of it is still further to equalise the exchanges between London and all other countries. This circuitous

method is called the *arbitration of exchanges*, and the sum which is given in London for the ultimate price it realises in Paris is called its arbitrated price. When only three places are used in the operation as above, it is called *simple arbitration*. When more than three are employed, it is called *compound arbitration*. The practical rules for working out these results are very simple, and will be found in any technical book on the subject. But it is very evident, that the quicker, safer, and cheaper the communication between countries become the less room will there be for such operations, because the limits of the variation of the real exchanges, which are the margin which renders such transactions possible, will constantly diminish.

91. When one country is indebted to another in a very large sum of money, or when one country agrees to lend a large sum to another, the method of transmitting it to the best advantage to the remitting country is an operation of considerable nicety and delicacy. If the sums to be remitted were very large, the expense and danger of the transit of the coin would have been very considerable in former times; but since the introduction of railroads, and greater internal security, such considerations would have little influence at the present day. But an actual and sudden withdrawal of a very large amount of bullion from a commercial country would cause the most disastrous consequences, when so many engagements had to be met at a fixed time. When such necessities, therefore, did arise during the last war, the operation was effected by means of bills of exchange, and the object to be obtained was, to prevent a sudden vacuum being caused in the currency of one country; but, by operating on all the different centres of payment of Europe, to cause a gradual and equable flow from all of them to the place of payment. We may give, as an

instance, the following, as narrated by Mr. Boyd, who had the management of the operation. In the year 1794 the English Government agreed to make a considerable loan to the Emperor of Germany, and the money was required to be sent from London to Vienna, causing as little disturbance as possible in the English money market:—

"The remittance* of so large a sum as £4,600,000 I considered as a matter of infinite difficulty and delicacy, so as to prevent its producing any remarkable effects upon the course of exchange. It was necessary to vary the modes of remitting, and to make use of the various means for that purpose, presented by all the different exchanges of Europe. It was not necessary to remit bills upon Hamburgh only, because it frequently happened that it answered better to remit to Hamburgh upon other places, such as Madrid, Cadiz, Leghorn, Lisbon, Genoa, &c., than to remit direct upon Hamburgh; and having constantly orders from Vienna with regard to the rates of the different remittances to be made, our attention was directed to the accomplishment of these orders, on the best possible terms. In fine it was necessary to take bullion, bills direct upon Hamburgh, and bills upon other places, all into our means of remittance, and to make the most of these modes of remittance without giving the decided preference to that mode which was the most favourable, because any one mode invariably adhered to, would soon have exhausted and destroyed that mode; whereas by turning occasionally to all the modes, and not sticking too long to any one particular mode, we had the good fortune to make upon the whole very favorable remittances."

92. We may mention another instance of a similar operation quoted by Mr. Macculloch:†—

"In 1804, Spain was bound to pay to France a large subsidy, and in order to do this, three distinct methods presented themselves.

* Evidence of Mr. Boyd before Committee of Secrecy of the House of Lords, 1797. p. 110.

† Commercial Dictionary; p. 581. Edit. 1854.

First, to send dollars to Paris by land; second, to remit bills of exchange directly to Paris; thirdly, to authorize Paris to draw directly on Spain. The first of these methods was tried, but was was found too slow and expensive; and the second and third plans were considered likely to turn the exchange against Spain. The following method by the indirect, or circular, exchange was therefore adopted. A merchant, or *banquier*, at Paris, was appointed to manage the operation, which he thus conducted. He chose London, Amsterdam, Hamburgh, Cadiz, Madrid, and Paris, as the principal hinges on which the operation was to turn; and he engaged correspondents in each of these Cities to support the circulation. Madrid and Cadiz were the places in Spain from whence remittances were to be made, and dollars were of course to be sent where they bore the highest price, for which bills were to be procured on Paris, or any other place that might be deemed more advantageous. The principle being thus established, it only remained to regulate the extent of the operation, so as not to issue too much paper on Spain, and to give the circulation as much support as possible from real business. With this view, London was chosen as a place to which the operation might be chiefly directed, as the price of dollars was then high in England, a circumstance which rendered the proportional exchange advantageous to Spain.

"The business commenced at Paris, where the negociation of drafts issued on Hamburgh and Amsterdam, served to answer the immediate demands of the state; and orders were transmitted to these places, to draw for the reimbursments on London, Madrid, or Cadiz, according as the course of exchange was most favorable. The proceedings were all conducted with judgment and attended with complete success."

93. The term *par of exchange* is also used in another sense, than the one we have already described, as applied to the exchange of one currency for another. When goods are sent from one place to another, the freight or carriage of them is charged in money, which is always added to their price; but when bankers remit money, the charge is made by keeping it a certain number

of days in their hands, during which they enjoy the interest of it, or if the money is to be paid immediately at the place it is remitted to, the interest of it at the market rate for a fixed number of days is deducted. The number of days between two places has been fixed by long custom, and is called the *par of exchange* between them. Thus if a person pays in a sum of money into a bank in Edinburgh, and wishes to receive a bill payable in London, the Edinburgh banker will give him a bill on his London agent, for the amount payable twenty days after date, and the interest of the sum for that time, and also three days of grace, defrays the banker's charges for sending the money from Edinburgh to London; or if the transmitter wishes to have a bill payable at sight in London, the Edinburgh banker will deduct the interest at the market rate for twenty-three days, and give him a bill for the remainder payable at sight. These twenty days are called the *par of exchange* between London and Edinburgh. They are also called the *usance.*

94. The different dates forming the *par of exchange* or *usance*, between different places, have grown up by custom, and were of course settled long before the modern improvements in the speed and safety of locomotion, and they certainly seem excessive at the present day. Until the year 1825 the *usance* or *par of exchange* between Edinburgh and London, was fifty days. In that year an Edinburgh banker offered to transmit money to London at a usance of twenty days, and the other banks were obliged to follow his example. But in the present time, when several express trains run daily from one city to the other in less than twelve hours, and the cost and danger of transmission is so much reduced, a usance of twenty days seems somewhat excessive. A usance of ten days would probably be sufficient to cover all risks and

charges, and leave a profit besides. And the same observation applies to most foreign cities as well.

95. We have seen that whenever English merchants have payments to make to their correspondents, they will always endeavour to discharge their debts by remitting goods instead of specie, if the state of the home and foreign markets will permit them. It is therefore of the utmost importance to the country that its manufactures should be the cheapest and best possible, and that they should be produced in the greatest possible variety; as the greater the variety, the more will the merchant's chances be multiplied of being able to avoid the necessity of paying in bullion. But as there are a multitude of commodities, both natural and manufactured, which are not capable of being produced in this climate, it is evidently a most desirable object to make this country the great entrepôt for the productions of foreign commodities, so that not only may the English public be supplied with any article they require at the shortest notice, but the English merchants may have the greatest number of opportunities of paying their debts in commodities, rather than in money, by exporting these foreign productions.

96. The revenue of this country, as well as every other, has always been greatly, if not chiefly, raised by duties levied on all foreign imports. This duty used formerly to be levied on the merchant at the time of the importation of the goods, so that he had to advance money for duties long before he could reimburse himself from his customers. This, of course, led to great monopolies, as only the rich merchants could afford to advance these duties at once, and they required to increase the price of the article to the consumers, to repay themselves for the loss of interest on capital. Not only was the article made dearer on this account, but it diminished importa-

tion very much, and so made foreign commodities much scarcer than they would otherwise have been. And all these causes encouraged smuggling, adulteration, and frauds of all sorts. In the year 1732, Sir Robert Walpole brought forward a scheme by which tobacco and wine might be deposited in public warehouses by the importers, under proper security, until wanted for home consumption, when the duty should be paid; and if they were exported, then they should be free of duty. The immense advantages of this plan were evident. By having the various products of foreign countries brought here, and kept in security at a small warehouse rent, it would have caused foreigners to resort to this country to supply themselves with all sorts of commodities, and it would have afforded the English merchants a much greater variety of productions at their command, to select for payment of their bills. This, however, was the chief feature of Sir Robert Walpole's famous excise scheme; and by the dishonest clamors of persons who were interested in maintaining the abuses and knaveries of the old system, the nation was driven into such a state of senseless phrenzy, that it nearly caused a rebellion, and was obliged to be abandoned, and was never brought forward again till 1803, when the first act for establishing a warehouse system was passed.

97. The immense advantage of the warehousing system in preventing the export of specie is apparent. But it also operates with equal efficacy in causing the import of specie, as whenever commodities are scarce and dear in other markets, foreign merchants know that they have only to come and buy them in England. By this admirable system this country is made the market of the whole world.

98. From the considerations detailed in the forego-

ing chapter, we see upon how many complicated circumstances the ebb and flow of bullion depends, and how necessary it is to consider the causes which influence its transmission, before we can pronounce whether it is advantageous or the reverse to the country. We see what an utter fallacy the old notion is, that an influx of bullion is in itself, and without reference to its determining causes, a sign of prosperity. There is one conclusion which may be received with the greatest confidence,—that when it is caused by the unnatural restrictions upon trade, and by the arbitrary interference of laws with men's natural instinct to trade in the way most conducive to their own interests, it is decidedly the least advantageous article of commerce. We see that we can no more assume that trade is profitable to us because specie is remitted to this country, than we can assume that money payments are necessarily profitable to the tradesman or manufacturer. On this subject, as it will be found, as well as on every other commercial subject, we seem to have exhausted every modification of folly and absurdity, before we finally arrived at the simple and cardinal rule which the French merchants announced to Colbert more than a century and a half ago—"LET THINGS ALONE," and the belief that men have generally the intelligence to discover and act for their own interests, far better than any government can do for them.

99. We must now consider what the effect of an inconvertible paper currency will be on the foreign exchanges, and the market price of bullion. So long as paper is convertible, that is, the holder of it has the power to demand payment in gold for it at sight, it is very clear that it cannot circulate at a discount, because if it fell to a discount every person who held it would immediately go and demand gold for it. But if while it enjoys considera-

ble circulation, the power of convertibility is suddenly taken away, then it becomes in all respects equivalent to a new standard just as much as gold or silver, and its value will be affected by the same principles as these two, viz., by the sole question of the *quantity* of it in circulation compared to the operations it represents.

100. Under the old system of making an attempt to fix the value of silver and gold relatively to each other, there was no power of convertibility of one into the other similar to the convertibility of the note. If silver fell to a discount, as compared with gold, no persons could demand as a right to have their silver exchanged for gold, consequently the inevitable result of a considerable change in the quantity of either metal was a change in their market values. Thus, in 1794 gold rose to 84s. if purchased with *silver* bullion; now, if speaking by analogy, the silver coin had been convertible into gold, the difference never could have arisen, any more than a bank note convertible at the will of the holder of it could circulate at a discount. Now paper, when issued as a substantive standard of value, follows exactly the same rules; if only the usual quantity of it be issued, *i. e.*, no greater quantity than would have been issued if it were convertible into specie, it will continue to circulate at its par value; but if these issues be continued, and if it be deprived of the natural corrector of an over-issue, viz., payment on demand, it is maintained in circulation, and exactly the same result follows as attends an excessive issue of silver,—it falls to a discount. Now, the silver coin may fall to a discount from two circumstances, either if silver be coined with too great profuseness the excessive quantity of it will *diminish its value*, even though the coin be of full weight; or, if the silver coin be suffered to fall into a degraded state by clipping and wearing,

so that it does not contain the full legal weight of bullion, it then becomes *depreciated.* The apparent result in figures will be just the same in either case, guineas will rise to 24s. or 30s. But as silver has an intrinsic value of its own, and is, from its qualities, a recognised measure of value, it is not correct to apply the term *depreciation* to it as long as the coin contains its full legal weight of bullion. But the case is different with paper; it is only received on account of bearing a promise to pay a certain quantity of bullion on the face of it, and if it is not able to fulfil that promise, it is *depreciated.*

101. It is evident that a *diminution in value* of the coin cannot be followed by any difference between the market and the mint price of the bullion. By the meaning of the words "mint price," however plentiful or however scarce gold may be, an ounce of it in coin must always be equal in value to an ounce of it in bullion. On the other hand, a *depreciation* of the coinage must inevitably be attended by a rise in the market price above the mint price of bullion, because, however plentiful, or scarce, gold is, three-quarters-of-an-ounce of it in coin can never be equal in value to one ounce of it in bullion.

102. Now, as the paper currency has no intrinsic value of its own, and is a mere parasitical growth upon the metallic currency, it is clear that it is an inaccurate term to apply the expression *diminution in value* to it at all. One absolute *nothing* cannot diminish in value. The only accurate word to apply to it is DEPRECIATION. Twenty shillings in silver do not profess to be able to command any quantity of gold; but a bank note professes to be able to command a certain quantity of gold, and if it cannot fulfil its promise it is *depreciated.*

103. Now, if for the public convenience it be deemed advisable to issue an inconvertible paper cur-

rency, the only way of maintaining its currency at par is by limiting its quantity. We do not mean by this, limiting its quantity to an absolute fixed amount, but by devising some means whereby *a greater quantity of it shall not be issued than if it were convertible into gold.* If more than this be issued, it will be followed by the same result as attends an excessive issue of silver, it will fall to a discount, which in this case is *depreciation*, and the necessary consequences of a depreciated currency will follow, viz., the market price (or paper price) of bullion will rise above the mint price, and the foreign exchanges will fall.

104. Now, if such a state of things happens, the proper remedy is to *diminish* the quantity of the paper in circulation until the market price of bullion is reduced to the level of the mint price. If the direct power of demanding five sovereigns be taken away from the holder of a £5 note, still, if he can purchase bullion with it in the market to the amount of five sovereigns, it is an infallible proof that the note is current at par; and the limitation need not proceed beyond that. But if this be not done, the next best thing is to allow all persons to receive the notes at whatever value they choose to put upon them, and to let them make a difference, if they choose, between the prices of articles when paid in gold, or in paper. If this be allowed, no very great inconvenience will take place in the internal trade of the country beyond a certain loss of *prestige* which must happen to an institution whose paper circulates at a discount.

105. But suppose the law, with more zeal for the honor of the paper currency, than discretion, declares it to be a crime to make a difference between paper and gold, and a punishable offence to give twenty sovereigns

in gold for twenty-one pounds in paper—what will be the consequence? Exactly the same as we have seen happened, when the silver and gold coins were improperly rated, *the one which was underrated disappeared from circulation.* We have seen this happen both in the case of the gold coin, and the silver coin. Now, when the inconvertible paper currency is issued in too great abundance, and has a tendency to overflow the channels of circulation, its natural effect is to raise prices when paid in it. If people were free in their transactions, they would gradually make a difference in price between payments in paper and payments in bullion; but if the owners of the coin are prevented by law from receiving more for it, than the same nominal sum in paper, they will do exactly the same thing, as is invariably done when in a metallic currency, part is depreciated and part is of full weight, —they will either hoard or export it. At all events it will disappear from circulation. Now, as the gold gradually disappears, and paper issues multiply, people begin to estimate all prices by transferring their ideas from the gold to the paper, and the paper ends by finally displacing the entire gold coinage.

106. The stamp on the coin is similar to the banker's "promise to pay" on a note. The stamp is the guarantee of the State that the coin does actually contain a given amount of bullion; the "promise to pay" is the banker's guarantee that he can pay so much coin if required. The convertibility of the coin into the legal amount of bullion is the test of the depreciation of the metallic currency; so the convertibility of the note into coin is the test of the depreciation of the note. If the power of demanding coin from the *State* be taken away, the power of commanding a certain quantity of bullion in the market still equally remains as the only test of its

value. The *Mint* price of bullion is the price paid in coins of the full legal weight, the *market* price means its price paid in the current coins, and a difference between the two is the proof and measure of the depreciation of the current coin. When paper became the standard currency, the market price of bullion meant the price of it when paid in the paper currency, or the paper price of it; and by a parity of reasoning, if the paper price of gold bullion rose above the Mint price, it was the *proof and the measure of the depreciation of the paper currency.*

107. Whenever the currency of a country becomes redundant, that is to say, that prices rise so much higher in one country than in its neighbours, that the value of money sensibly diminishes, the natural corrective for such a thing is to take a certain portion of it out of circulation, so that by diminishing the quantity of it, its value may be raised. When people find that the same quantity of gold will not purchase an equal amount of commodities in this country as they will in another, their own natural instincts will lead them to purchase commodities abroad where they are cheap, and bring them for sale here where they are dear. The natural instincts of trade will therefore produce an equilibrium in value in the currency of neighbouring countries.

108. Now when the currency of a country consists partly of paper and partly of gold and silver, it is quite clear that only the metallic portion of it can be exported in payment of foreign commodities. The paper portion of it which has no value abroad, must remain at home. If the issues of the paper be continued, so as to prevent the currency from recovering its value, the process of the exportation of the metallic portion will go on until it is entirely exhausted. If this be the case, the only method of restoring the currency to its former value is by

diminishing the quantity of the paper, until the drain is stopped by the enhancement of the value of the whole currency. There is, however, a School of Doctrines, that maintains that as the gold goes out, paper should be issued to supply the vacuum until the gold comes back. But it requires little sagacity to see that if that be done, *the gold never will come back again*, and the drain will not cease until it is totally exhausted, and the only way to bring it back again is to raise its value at home, which can be done only by removing the plethora of paper. When the currency is in its healthy state, the oscillations of the exchange may be compared to those of a tight, staunch ship, which has always a natural tendency to recover itself; but when there is an excessive quantity of paper, it is like the same ship waterlogged, when she once heels over she never can recover herself until the water is pumped out.

CHAPTER VII.

UPON THE RISE AND PROGRESS OF BANKING.

UPON THE PROGRESS MADE IN BANKING BY THE EGYPTIANS—JEWS—GREEKS—ROMANS—THE BANK OF VENICE—BARCELONA—AMSTERDAM—HAMBURGH—SCOTLAND—THE SCOTCH SYSTEM OF BANKING.

1. We have in the preceding chapters investigated at some length the circumstances out of which the necessity for a currency originated, its definition and uses; and we shall proceed to describe the different methods which have been devised and practised for the purpose of its safe custody, for extending its uses, economising its quantity, or multiplying its extent. The institutions which effected these purposes are designated under the modern term of *Banks*, though under this general expression are comprehended offices for very different purposes. In the previous pages we have always endeavoured to commence with the simplest ideas of each subject, and to trace their gradual development and progress. We shall endeavour to follow the same general method in the following chapters, by describing the first origin of what is included under the term "Banking"; the different principles which were gradually introduced into it, and the improvement and modification they effected in the system previously

existing, until we arrive at the highly artificial state which it now presents. It is not, therefore, a history of banking in different countries that we wish to consider, but a history of the progress and development of the principles of banking. Pursuing, therefore, the same method as we did regarding the progress in the use of a currency, we may give a short notice of the progress which the ancients made in the science of banking.

2. The word "banking" has been used in so many different senses, that it is not very easy perhaps to give such a definition of it as shall enable us to decide when we are to consider that it originated. The different species of dealing in money, which include money-lending, money-changing, and banking, are so associated in popular ideas, that it is not very easy to separate them. In the modern sense, however, we should be inclined to say that the word "banking" included the ideas both of money-borrowing and money-lending, of receiving deposits from other persons for the sake of safe custody, as well as lending out money upon interest. If it be accepted in this sense, however, it must be clearly understood that this was not the original meaning of the word, and that the business of the persons from which the name sprung was chiefly, if not solely, that of usurers, or persons who lent their own money out at interest.

3. The lending of money at interest was the original business of banking upon which all the other ideas were subsequently engrafted. But when the idea of lending money at interest sprung up, is totally lost in the mists of antiquity. The invention of money and the practice of lending it out at interest took their rise in ages so remote as to have left no traces in authentic history. We have already noticed the passage in Genesis where the use of money is spoken of in terms that imply it was a long

established custom. It is true that there is not a parallel passage speaking of usury in similar terms; but from the restrictions which Moses laid upon the Israelites with respect to lending money at interest, we are justified in inferring that it was the common practice among the nation from which the Israelites came out. We may be very sure that the lawgiver would not have been so minute in his regulations on the subject unless he had witnessed its effects in Egypt. We are justified in assuming, therefore, that there were money-dealers or usurers in Egypt from the remotest antiquity. The laws respecting debt and usury underwent some change. Boccheris the Wise, who reigned about 800 B.C., enacted a statute of frauds, in consequence of the multitude of disputes that arose in cases of debt.* It was declared that no agreement should be binding unless it was contracted in writing; and that if any one took an oath that money had not been lent him, the plaintiff should be defeated. Usury was limited, and when money was borrowed even with a written contract, it was forbidden to allow the interest to increase to more than double the original sum. Additional formalities of the most solemn nature were subsequently imposed upon every loan of money. Arychis enacted that no one should borrow money without giving in pledge the body of his father, or the tomb of his ancestors,† and if he failed to redeem so sacred a deposit he was considered infamous, nor could he be buried himself while the debt was unpaid, nor could he inter any of his family, as the creditor was put in actual possession of the family tomb.

4. The Mosaic polity was framed with the view of

* Wilkinson's Popular Account of the Ancient Egyptians. Vol. II. p. 217.

† *Ibid.* p. 218.

making the Jews an agricultural people. Though it did not go so far as to forbid foreign commerce, it served to discourage it, rather than the reverse. It seems to endeavour to encourage the simple and unchanging habits that distinguish an agricultural people; and its chief provisions seem therefore directed to preserve the Jews as such. They were expressly authorised to lend money at interest to strangers, but not to their own countrymen, (Deut. xxiii., 19-20), though this latter prohibition seems rather directed to prevent them from oppressing any one who had fallen into misfortune, than from lending money to promote commerce. "If thou lend money to any of my people *that is poor by thee;* thou shalt not be to him as an usurer; neither shalt thou lay upon him usury."*—"And if thy brother be *waxen poor and fallen in decay with thee;* then thou shalt relieve him, yea, though he be a stranger or a sojourner, that he may live with thee. Take thou no usury of him, or increase; but fear thy God, that thy brother may live with thee. Thou shalt not give him thy money upon usury, nor lend him thy victuals for increase."† We may well suppose, that while the Israelites were occupied in establishing themselves in the land, they had neither the means nor the opportunity to pay much attention to money-lending. But having settled in the neighbourhood of the most commercial people of antiquity, the Tyrians and Phœnicians, it could scarcely be expected that they should not imbibe their habits. Before the time of Solomon, their chief mercantile transactions appear to have been carried on at the great national religious festivals, which were taken advantage of to answer the purpose of fairs as well. This monarch was the first to carry on a considerable commercial intercourse with other nations, and one of the

* Exod. xxii. 25. † Levit. xxv., 35, 36, 37.

great objects of his foreign trade was to bring gold from Tarsus and Ophir. On one occasion a single voyage produced him 420 or 450 talents of gold,* (about £2,299,500);† on another occasion he received in one year 666 talents of gold (about £3,646,350), besides all he received by trade from merchants, and tribute from the kings of Arabia and the governors of the country.

5. Our curiosity is raised without being gratified in the attempt to conjecture what were the articles of commerce which Solomon could have sent in exchange for the marvellous amount of gold which is recorded as having been poured in upon him, in addition to all that he received by way of presents, even supposing that we make considerable allowance in several instances for exaggerated figures.‡ We read that he made 200 targets of solid gold, each weighing 600 shekels, and 300 shields, each weighing three pounds, besides innumerable other articles. Silver was held in such low repute that he disdained to have any plate made of it, for "it was nothing accounted of in the days of Solomon." If the gold-producing countries had been within his dominions, as the American mines were under the crown of Spain, we might account for this by way of royalties paid upon the ore extracted. But they were independent nations, and gold could only have been purchased from them in the usual way of commerce, and as we know that the Jews had no

* 2 Kings, ix., 28. 2 Chron., viii., 18.

† *Vide* Jahn's *Archœlogia Biblica.* Oxford Edit. 1836. P. 123.

‡ It is certain that numerical errors of great importance have crept into our text of this part of scripture. In 1 Chron. xxii., 14, David says he has prepared 100,000 talents of gold, and 1,000,000 talents of silver for building the temple. In chap. xxix., 4, he is made to state it at 3,000 talents of gold, and 7,000 of silver. Josephus, Antiq. VII. 14, makes it 10,000 talents of gold, and 100,000 of silver.

manufactures, we are utterly lost in the vain attempt to conjecture what that commerce could have been, which could have purchased such enormous masses of the precious metals from trading nations.

6. The intestine commotions which distracted and divided the Jewish people, and the feebleness of the princes who ruled over them had the natural effect of destroying the commerce, which had attained so flourishing an extent under their great king, and the only attempt we read of to revive it by Jehosaphat, about 913 B.C., failed by the destruction of the ships, and though it revived to some extent afterwards, it never equalled its glory during the undivided kingdom.

7. The want of encouragement afforded by the Laws of Moses to trade, with the prohibition of usury, which he enacted among the Jews, as well as the effluxion of debts, which were extinguished every sabbatical year, effectually prevented the business of what we call banking among the people, as long as they obeyed his laws. We read, however, that the practice of lending money out at usury prevailed very extensively after the return from the captivity, and much general distress was occasioned by the weight of debts. The rich people lent to the poor money upon a mortgage of their lands, vineyards, and houses, to buy food during a dearth; and many were obliged to mortgage their lands and vineyards to pay their taxes.* Nehemiah rebuked these money-lenders in public, and compelled them to release the people from their claims. Up to this time, and long after, we have not been able to discover any trace of the practice which we are accustomed to consider banking, where persons deposit money with others, either with or without interest, who again lend it out for commercial purposes; but it had certainly sprung

* Nehemiah, v., 3.

up, and was prevalent in the time of our Saviour, and in the parable of the talents we find the idle servant expressly rebuked for not putting his money into a banker's hands, who gave interest upon deposits.

8. These persons were the money-changers, whose business it was to exchange the coin of foreign countries for the strangers who came to Jerusalem, of course charging a commission for doing so. As we find that they were in the habit of receiving deposits, and giving interest upon them, we may very naturally conclude that they advanced money for commercial purposes, as well as lent it on mortgage, and so performed the functions of a banker. We are so ignorant of the commercial transactions of the Jews, that we are unable to say what banking expedients these money-dealers had devised. We may gather from the parable of the talents, that the restriction placed on the Jews by Moses regarding the taking of usury did not apply to the advance of money for promoting regular commerce, but only to those cases where a loan of money was made to help a poor neighbour out of difficulties; which appears further from the saying of our Lord preserved by Clement of Alexandria—

Γίνεσθε δόκιμοι τραπεζῖται.
Be honest Bankers!

9. The subtle and commercial character of the Greeks, sharpened and developed by the barren soil of Attica, carried the practice to a much more considerable extent. The unsettled state of the little commonwealths into which the Greek nation was divided, rendered it necessary for them to procure some safer custody for their treasures than the precarious safety of their own homes. We accordingly find that from a very early period they were in the habit of depositing them in the temples, par-

ticularly those of Apollo. We are not informed whether the treasurers of these temples usually had any power to lend out the money thus deposited with them. The Athenians, when they were promoted to the head of the Greek confederacy, established the public treasury at the temple of Apollo in Delos,* and caused all the meetings of the federative councils to be held there. This island became a great commercial emporium, more particularly after the destruction of Corinth 146 B.C., and the keepers of the temple acted as bankers, by lending out the money deposited with them.

10. We are not informed when private persons commenced the business of banking at Athens, but in the time of Demosthenes it was in full vigor. The rate of interest was left absolutely free by Solon, but he took away the right of imprisoning the person of the debtor. Finding that the commonalty was sunk into extreme misery owing to the weight of their debts, he on one occasion reduced the interest, and depreciated the standard, by ordering the *mina* which before passed for 73 drachmas, to be current at 100. Plutarch† remarks that Solon was the first who smoothed over foul deeds with soft words, and employed the sophism of calling an abolition of debts "a disburdening ordinance."‡ He, however, says of this ingenious expedient of depreciating the standard "so that as they paid the same by tale, but less by weight, it was a great relief to those who had to pay large sums, but yet no loss to those who had to receive it."§ Of such antiquity is this paradox! Considering that it was such a benefit, what need was there to stop at 100? why not make it 200?

* Thuc. I. 96. † Life of Solon, p. 344. ‡ *σεισάχθεια.*

§ *ὥστ' ἀριθμῷ μὲν ἴσον, δυνάμει δ' ἔλαττον ἀποδιδόντων, ὠφελεῖσθαι μὲν τοὺς ἐκτίνοντας μεγάλα, μηδὲν δὲ βλάπτεσθαι τοὺς κομιζομένους.*

which of course would only have made the benefit so much greater!

11. The free spirit of the Athenians revolted against commercial restrictions of all sorts, at least until their degenerate days. Though Attica was a rocky, barren soil, which produced wheat with difficulty, and the landlords were heavily taxed, we do not find that they ever made any attempt to protect themselves, by curtailing the food of their fellow citizens, and imposing duties on the "untaxed foreigner," and while the Athenian legislator prohibited the loan of money upon the security of the person of a citizen, the rate of interest was left to the mutual agreement of the borrower and the lender. The profits and insecurity of trade must have been enormous, when we read, that the only case in which legal interest was determined by way of damages, it was fixed at 18 per cent., which was the medium rate in common use. The ordinary rates varied from 10 per cent., to 36 per cent.

12. The Athenian bankers not only made a profit by exchanging foreign money, but also received deposits at interest. The father of Demosthenes kept part of his capital at bankers. Though they were generally of low origin, such as freedmen, aliens, or persons who had been admitted as citizens, they gradually rose into great credit, which, in the case of the principal ones, extended throughout Greece. They obtained so much confidence that business was transacted with them without witnesses; money, and contracts of debt, were deposited with them, and agreements were concluded or cancelled in their presence.* They obtained 36 per cent. for loans.

13. The Athenian bankers were the first that we

* Boeckh's Public Economy of Athens. P. 127. English Edition.

are aware of, who invented the method of *discount*, that is, of retaining the profits at the time of the advance, as we learn from Plutarch was their practice. In his violent tirade against money-lending, he is particularly severe against the invention of discounting. "It is said that hares bring forth and nourish their young at the same time that they conceive again, but the debts of these scoundrels and savages bring forth before they conceive! For they give and immediately demand back, and take away their money at the time they place it out, and they place out at interest what they receive as interest. The Messenians have a proverb:—

'There is a Pylos before Pylos, and yet another Pylos still.'

But it may be said to the usurers:—

'There is a profit before profit, and yet another profit still.'

And then forsooth they laugh at philosophers, who say that nothing can come from nothing!"* When the customer borrowed, he either gave his *note-of-hand* (χειρόγραφον) or his bond (συγγραφὴ), or in some cases without any security at all but his personal integrity. The engagement acknowledging the receipt of the money, and the promise to pay it at any fixed time, constitute the essence of a promissory note. We are not aware if the Greeks perceived the facilities such engagements afforded, for assigning debts. If they had done so, we should probably

* Plutarch.—Περὶ τοῦ μὴ δεῖν δανείζεσθαι.—P. 296. Τοὺς μὲν γὰρ λαγὼς λέγουσι τίκτειν ἅμα καὶ τρέφειν ἕτερα, καὶ ἐπικυΐσκεσθαι πάλιν. τὰ δὲ τῶν μαστιγιῶν τούτων καὶ βαρβάρων χρέα, πρὶν ἢ συλλάβειν, τίκτει, διδόντες γὰρ εὐθὺς ἀπαιτοῦσι, καὶ τιθέντες αἴρουσι, καὶ δανείζουσιν, ὃ λαμβάνουσιν ὑπὲρ τοῦ δανεῖσαι. λέγεται μὲν παρὰ Μεσσηνίοις,

Ἔστι Πύλος πρὸ Πύλοιο, Πύλος γε μὲν ἔστι καὶ ἄλλος

λεχθήσεται δὲ πρὸς τοὺς δανειστάς,

Ἔστι τόκος πρὸ τόκοιο, τόκος γε μὲν ἔστι καὶ ἄλλος,

ἔιτα τῶν φυσικῶν δήπου καταγελῶσι, λεγόντων μηδὲν ἐκ τοῦ μὴ ὄντος γενέσθαι.

have been informed of it, nor do we find that they discovered the convenience of paying by way of *cheques*, or *drafts*, upon their bankers.

14. Notwithstanding the enormous rate of interest that they received, and the great credit and reputation which the more eminent of them enjoyed throughout the Grecian world, the details which have come down to our time respecting one of them who stood in the highest credit for wealth and integrity, do not give us any very exalted idea of their fortunes. Pasion, who was a clerk in the office of the bankers Antisthenes and Archestratus, attained such credit that he set up business on his own account, and enjoyed a great reputation throughout Greece. On several occasions he did great service to the state, and was reputed a man of great wealth, yet we find that his landed property was worth 20 talents or £4,875. He had 50 talents, or £12,187 10s. out at interest of his own, and his deposits from his customers were 11 talents or £2,681 5s., and the whole profits of his banking business were only 100 *minæ*, or £406 5s. a year;* which seems nothing very great for the most eminent banker in so wealthy and powerful a city as Athens.

15. The uncommercial and uninventive Romans introduced a further step in the practice of banking. The first mention we have of banking at Rome, is in the year 352 B.C., when the Plebeians were in deep distress, and had to borrow money from new creditors to pay off the principal and interest of their old debts, and so got deeper and deeper into debt. On that occasion public officers, called *quinqueviri mensarii*, were appointed to advance money out of the public treasury to persons who could offer security. As they were merely agents of the treasury we

* Smith's Dictionary of Greek and Roman Biography and Mythology. Art. *Pasion.*

can hardly call these commissioners bankers. This expedient of relieving the poorer classes was several times adopted when the pressure of debts became unusually severe. Another class of bankers who were a permanent institution, were named *mensularii* or *numularii*, who both acted for the state, and also received the deposits of private individuals. They were also authorized by the state to act as exchangers, and give Roman coins for foreign ones at a fixed rate of exchange. Those who were entirely private bankers, were called *argentarii*. These private bankers transacted their business very much as many modern ones do; they kept their customers' accounts, and they introduced one of the greatest conveniences in the system of banking, viz.—making payments by means of cheques. A cheque was called *attributio* or *prescriptio*. They also made use of promissory notes.

16. We have already observed that a cheque on a banker is a bill of exchange. Hence we see that, to a certain limited extent, bills of exchange were in use among the Romans, though the extended utility they, as well as promissory notes, received by being made transferable from hand to hand by delivery, did not occur till the revival of commerce in the thirteenth or fourteenth century.

17. It was so universally the custom to keep banking accounts at Rome, that almost all the terms relating to the transactions between debtor and creditor were borrowed from banking business, and their method of keeping accounts has given rise to the modern Italian system of book-keeping by double entry.* We are not aware whether they practised the method of discounting. We see, then, that the Romans made the first step in the

* Smith's Dictionary of Greek and Roman Antiquities. Art. *Argentarii*.

great engine for the promotion of commerce, which has conduced so much to the prosperity of modern times, viz., the transferability of the debt, apart from the coined money which represents it. But having made this invention, which was one of great importance in itself, they made no further progress, but, like the Chinese, who first invented block-printing, never were able to advance beyond that first step. We are not surprised at the Romans, who were chiefly an agricultural people, failing to perfect this invention; but we might have expected that the ingenious and subtle Greeks, who were eminently a commercial people, would have advanced further than they did.

18. If the art of banking was continued, or made any progress during the dreary waste of the Byzantine empire, we are not informed of it, or, at least, if any notices of it are buried among the wearisome annals of the Byzantine historians, it would not repay the trouble of searching for them. That there were usurers, we can scarcely doubt; but as it was declared illegal to take interest for money, the only and inevitable consequences of this must have been to make the loans more onerous to the borrower. We may safely conclude, however, that nothing remarkable occurred till the year 1173, which will be for ever memorable as the era when the system of a national debt, or a public funding system, originated. Various causes had contributed to embroil the young and enterprising republic of Venice with the effete government at Constantinople, under the emperor Manuel Comnenus. Ever since the time of Alexius I., the Venetians had possessed a street or quarter of their own at Constantinople. Seamen never have been the quietest of mortals, nor those most amenable to civil discipline; and the Venetians were not less licentious

than others. Although they were bound to reside within certain limits, the prosperity they enjoyed there increased their numbers, and many resided beyond the limits assigned to them, and they frequently raised tumults in the streets of Constantinople.* On one occasion, in 1171, they had a great quarrel with the Lombards, and the emperor determined to make the tumults arising from it a pretext for bringing them under more effective control. Every Venetian was ordered to reside within the appointed quarter, and take the oath of allegiance to the emperor, and put himself under the Byzantine law. After many of them had done this, fresh disturbances broke out with the Lombards, and the Venetians overpowered their opponents and plundered their warehouses. The emperor, not unnaturally, incensed at these outrages, took the opportunity of gratifying his hatred against the Venetians, and ordered all their property to be seized throughout his dominions, and themselves imprisoned. At this outrage the Venetian Senate were inspired with the desire of revenge, and they fitted out a fleet of one hundred gallies, and twenty ships of war, to exact reparation, and they ravaged and demolished several towns in Dalmatia, and, passing on to the Archipelago, they were proceeding to treat the Greek possessions in that sea in a similar manner, when the emperor sent persons to negociate with them, and they landed at Chios. The intrigues of the emperor succeeded so well, that the whole season was spent in negociation,† and the doge determined to winter in the island. In the meantime, a dreadful pestilence broke out in the Venetian fleet, caused, it was said, by the springs and wells in the island having been

* Finlay's History of the Byzantine and Greek Empires, page 221.

† Universal History, modern part, Vol. X., page 197.

poisoned by the emperor's orders; and when, in the spring of 1173, the Byzantine fleet came to attack the Venetians, the only thing they could do was to abandon the island as speedily as they could, and, with the miserable remnant of their ships, to make for Venice. Of the whole expedition, only seventeen vessels survived to reach Venice, with their crews impregnated with the seeds of the pestilence, which soon spread the infection over Venice, so that immense numbers, of all ages, sexes, and degrees, were swept away by it.* The popular fury accused the doge of treachery, and he was assassinated in the public assembly. This terrible disaster gave the senate the opportunity of making great changes in the constitution of the state, and was the occasion of the institution of what afterwards became the *Bank of Venice.*

19. The new doge was Sebastian Ziani. A simultaneous war with Frederick Barbarossa still further oppressed and disordered the republican finances, and the Great Council decided upon raising a forced loan. Every citizen was obliged to contribute the one-hundredth part of his possessions to the exigencies of the state, upon payment of interest at the rate of 5 per cent. The public revenues were mortgaged for the payment of the interest, and a public body of commissioners were instituted, called the Chamber of Loans *(Camera degli Imprestiti)*, for managing the payment of the interest to the fundholders, and transferring the stock. Several subsequent loans, both voluntary and forced, were afterwards engrafted upon this one, the latter being usually 1 per cent. of the property of each person. In 1520, the interest upon the first sum funded was reduced to 2 per cent., and a considerable part of the capital was

* Daru, Hist. de Venise. Vol. I., p. 134.

paid off at the price actually paid by the then holders of the stock.*

20. This Chamber of Loans was originally instituted for the purpose of managing the public debt, and could scarcely have been called a bank. It was not the creditors who were incorporated, because every citizen in the state was a creditor, or contributor to the loan. Hence, it did not resemble the bank of St. George, at Genoa, or the bank of England, which were formed entirely of voluntary contributions to the public loan.

21. This Chamber of Loans became afterwards the famous Bank of Venice, or, to speak more correctly, it afterwards added banking business to its original duties. Its constitution does not seem to have varied for some centuries, nor does it appear to have carried on anything like banking business for several centuries after its foundation, though many writers, not paying sufficient attention to this change in its constitution, date the foundation of the bank of Venice in 1171, or even earlier, which is certainly not a correct mode of expression. Mr. Hallam states the funding system originated at Florence;† but he has overlooked the origin of this chamber at Venice.

22. Venice was a small state, but gradually became the centre of an enormous commerce, and, as an inevitable consequence, a great quantity of clipped and worn

* We have been more minute than we should otherwise have been regarding the origin of this bank, because we are not aware of any account of it, which is at all accurate, in English. Adam Smith shews less than his usual accuracy when he says, that the Bank of Venice was originally instituted for the purpose of paying bills of exchange in money of full weight; for it is certain that bills of exchange were not in common use for nearly two centuries after its foundation.

† Vol. I. of his Collected Works, page 440.

foreign coin circulated in it, brought by the foreigners who resorted to it. When the practice of bills of exchange became common, the degraded state of the currency caused an intolerable inconvenience to merchants. To obviate this, at some subsequent time, though at what precise period we are not informed, the plan was devised of the chamber of loans receiving deposits from private persons. Every merchant deposited there the coins he received, and he was credited with the amount of their value in bullion, and the bank gave him a corresponding number of its notes, payable to bearer on demand in full weight of bullion. As the bank always pledged itself to pay in full weight, its notes always bore a premium, or *agio*, as compared with the worn and clipped coin in circulation. All bills of exchange between merchants were made payable in this bank money. The bank, however, does not ever seem to have discounted bills upon its own account, and, as its paper only represented the sum of bullion actually in its coffers, it made no increase of the quantity of the currency in circulation. Its only advantage was to save the wear and tear of the coinage, and to insure a uniform standard in mercantile contracts. This bank continued to enjoy great credit and repute till it fell, with the republic, in 1797.

23. The Spanish writers claim the Bank of Barcelona as the first real Bank in the modern sense of the word. It was founded in 1401 by the magistrates of the town. The origin of the important invention of bills of exchange is involved in considerable obscurity, but it certainly was extensively established in the 14th century. Barcelona seems to have been one of the places where their use and customs were brought to the greatest perfection. In 1394 an ordinance was issued by the city that bills of exchange should be accepted within 24 hours after

presentation, and that the acceptance should be written on the back of the bill,* and in the year 1404, the magistrates of Bruges applied to those of Barcelona for information as to a doubtful point in the practice of bills. In the year 1401 the magistrates erected a public bank for receiving the deposits of customers, and discounting the bills of the merchants, and the public property of the city was pledged for the security of the deposits. When so excellent a writer as Capmani, expressly asserts that this bank was the first of its kind, we may consider that he would not have made such an assertion without good authority, and he could not have made it if the Bank of Venice had done similar business at that time. This bank, then, is justly entitled to be considered as the most ancient public bank in Europe, it does not appear however that it issued notes, or that its customers paid by means of cheques. As it used the deposits of its customers in discounting bills, it was of far greater use to commerce than the Bank of Venice, which kept its specie idle in its vaults.

24. The next great bank which was almost cotemporaneous with that of Barcelona, was the Bank of St. George instituted at Genoa. Like the Bank of Venice it originated from the necessities of the state. It had been usual for the republic to borrow large sums from the citizens, and assign certain branches of the public revenue as funds for the payment of the interest, which were put under the charge of some of the most eminent citizens. As these loans became more numerous, their multitude bred confusion, and the whole were consolidated into one capital stock to be managed as a bank, which was called the Chamber of St. George, which was governed by eight protectors annually chosen by the stock holders. Several branches of the public revenue were assigned over to them

* Bechmann's Hist. of Inventions, quoting from Capmani.

to collect on behalf of the corporation, which eventually became one of the leading powers of the state; like the Bank of Venice it was one of deposit and issue, and all bills of exchange drawn upon Genoa were made payable in bank money. It was pillaged by the Austrians in 1746, and never recovered its former prosperity.

25. The Mosaic interdict of usury was adopted and confirmed by the rulers of the Christian church. Money lenders, never a very popular class anywhere, were laid under the divine curse; the consequence of which was, that in the sixth century the Jews had become the great money-lenders of Christendom. As the Jews had no hopes for the future, another sin, more or less, could not influence their final destiny. While, therefore, usury was strictly forbidden to Christians, the Jews were not molested, and from that era we may date the strong bias of the children of Israel to a method of trading, which was further strengthened and aggravated by the subsequent treatment they received in every nation in Europe. When it was further discovered that the prince of the pagan philosophers concurred with the divine legislator in condemning interest upon loans of money, it became a settled dogma, just as certain as the stability of the earth, that any Christian who lent out money at interest cut off from himself all hopes of final salvation. The irresistible temptation of profit, however, induced many Christians to prefer seizing a present gain, even at the risk of a doubtful penalty. The active spirit of commerce demanded the use of capital, and the instinctive sense of mankind rejected the revolting absurdity that he who furnished the means, and risked the loss of his fortune, should not participate in the profits, and numerous subterfuges were devised, so that while the name of usury was avoided, the thing might be done.

26. Nowhere were the inconvenience and absurdity of the doctrine of the wicked nature of interest felt more strongly than at the fountain of infallibility, the Papal court itself, and nowhere was greater ingenuity shewn to circumvent its own dogmas. A capital was collected for the purpose of lending money to the poor for a certain time, on pledges, without interest. To forward these objects the popes dispensed to those who contributed to them indulgences with liberal prodigality. Burdensome vows were allowed to be commuted into donations to lending houses. A rich donation effaced the stain on the birth of children of wealthy libertines. But as these establishments required the services of a staff of officials, and as there could be no profits to pay them a salary, the popes endeavoured to obtain their servants to forego mundane comforts and necessities, in consideration of an unlimited supply of future blessings.

27. Such an organisation as this, however, could be of no long endurance. If it were a charitable thing to advance money for nothing to persons after they had become poor, it was far more prudent and sensible to lend them money at a moderate interest to help them to trade, and to prevent them becoming poor. Rich persons found that papal indulgences were but a poor return for hard cash; and as a matter of necessity the institution incurred some losses, it was obliged to borrow money at interest to pay its expenses. The popes therefore determined to allow the lending houses to receive interest, not for the whole of their capital, but for such a portion of it as would enable them to defray their expenses. When this breach was made, the next step was not long following. In order to attract a sufficient quantity of capital, those who advanced them money were allowed to receive a moderate interest for its use, which was not entered in

the balance sheet as "Interest,"—that would have been damnable—but was concealed under the euphemism of "establishment charges." The papal Bull allowed it to be given *pro indemnitate.*

28. However cunningly and speciously this "artful dodge" was devised to do the thing which they dared not name, the lynx-eyed divines soon saw through the trick, and a violent ferment immediately arose, and it was fiercely debated whether it was lawful to do evil—*i.e.*, take interest—in order that good might come. When this tempest was at its height it was quelled by a folly of equal magnitude with itself. The Pope issued his Bull, declaring these holy mountains of piety, *sacri monti de pietà** to be legal, and damning all who dared to doubt it. All scruples on the subject being silenced in so satisfactory a manner, other cities hastened to follow the example, and establish lending-houses, and they became common throughout Italy in the 15th century.† Notwithstanding, however, the papal sanction they had received, many writers and preachers considered them to be criminal, and the dispute was revived with considerable warmth in the 16th century, and it was at length set at rest by Leo X, who in the 10th sitting of the council of the Lateran, issued a special Bull, declaring Lending Houses to be legal and useful, and that all who dared to preach, dispute, or write against them should be placed under the ban of excommunication. He also justified them on the broad principle, which established the propriety of interest, that those who received the benefit should share the burden: *qui commodum sentit, onus quoque sentire debeat.*‡

* Any fund, or capital stock, is called in Italian a *monte.*

† Vide Bechmann's Hist. of Inventions. *Lending Houses.*

‡ Bechmann's Hist. of Inventions. Vol. III., p. 36. Edit. 1814.

29. Notwithstanding the thunder of the Vatican, and the tempests that raged in the theological atmosphere, regarding the sinful nature of interest, the practice spread from the Jews to the Christians, and in the 13th century had attained flourishing dimensions. The spiritual excommunications of the church, and the temporal punishments of princes, were equally ineffectual to prevent mankind from pursuing their natural instincts. Edward the Confessor had enacted, that any one convicted of usury should be stripped of all his possessions, and be deemed an outlaw, as he had heard the maxim at the French court, that usury was the root of every crime.* Every country in Europe enacted similar punishments, and the frequency of the denunciations proves the extension of the practice. Notwithstanding all these terrible penalties, the contest was vain, and several states were driven to the necessity of limiting what they could not prevent. The law of James I. of Arragon, in 1228, limited the rapacity of the Jewish usurers to the ample margin of 20 per cent. per annum.† At Verona in the same year it was limited to 12½. Somewhat later, at Modena, it was fixed at 20.‡ We have seen that Venice named the rate she would pay her creditors at 5, but Genoa, which was not able to carry matters with so high a hand, was obliged to pay from 7 to 10 at a later period.

30. About the beginning of the 13th century, the merchants of Lombardy and the south of France, took up the business of money-dealing, and about that time the plan of remitting money by means of bills of exchange was devised. Cahors in France, and Asti in Lombardy, were particularly noted for this species of trade, hence

* Ducange.—Art. *Usurarii.* Paris edit. 1842.

† Ducange.—Art. *Usurarii.*

‡ Hallam's Middle Ages. Chap. ix., pt. 2.

money-dealers were called Lombards, Cahoursini, and a great variety of other names, and they were put under the ban of the church, and peremptorily excluded from all ecclesiastical soil.* Nothwithstanding this censure, their utility was so great, more especially in remitting the tribute of the Italian clergy from transalpine countries, that the Lombard money-dealers established themselves in every country,† and thus the convenience of the clergy contributed in no small degree to establish the business which was under the ban of the church.

31. The ancient name for a banker in Latin was *Argentarius*, or *Numularius*, but at some period of the middle ages, probably about the 10th century, though it is impossible to say precisely, they adopted the name of *Cambiator*, or *Cambitor*, or *Campsor*, (for the word is spelt in a great variety of ways), an *exchanger*, a name probably less offensive than the former ones, which savoured of usury. They used to keep benches, called *cambii*, before the doors of the churches,‡ or at the great fairs for changing the money of foreigners, whence the modern name of *banker* is derived. The temptation to malpractices to which they were exposed, caused the magistrates of different towns to form them into a regular order, and take security for their good conduct. Thus the statutes of Marseilles ordained that no one should carry on the business, unless he was a citizen of the town, and gave security to the amount of 300 marks for his good conduct and solvency.§ Philip the Fair incorporated them; and James II. of Arragon, forbid any to set up such a business without giving security.

* Ducange.—Art. *Cahoursini.*

† Hallam's Middle Ages. Chap. ix., pt. 2.

‡ Ducange.—Art. *Cambii.*

§ Ducange.—Art. *Campsor.*

32. Bills of exchange originated with these persons. When a person was going to travel from one city to another, the inconvenience of carrying the coin was so great that the simple expedient of paying it to a *cambitor* in the place he was leaving, and receiving a letter from him to a *cambitor* in the place he was going to, requesting him to pay it, was devised, and these were called *literæ cambitoriæ*—money-dealers' letters. It has been said that the Jews devised this expedient, but there is no good authority for such an assertion, and their very name seems repugnant to such an idea. There is no reason for supposing that the *cambitores* were only Jews; and if they had been invented by Jews, in contradistinction to the *cambitores*, they would probably have been called by some name indicative of their origin. But such does not ever seem to have been the fact. They were no doubt originally only drawn in favour of a particular person, and the prodigious extension of their utility, which they received by making them negotiable, or transferable from hand to hand, was not effected till some time later,* probably not till the middle of the 14th century.

33. During the 16th century the commercial enterprise of the Dutch raised Amsterdam to be one of the principal mercantile centres of Europe, and being a small state, the same inconvenience was felt there as at Venice. The great quantity of clipped and worn foreign coin, brought from all parts of Europe, had reduced the value of the currency about 9 per cent. below the standard. The inevitable consequence followed; as soon as new money was issued from the Mint it immediately disappeared, either by being melted down, or exported, and this of course caused the greatest inconvenience in the payment of bills, and the City followed the example of Venice, and

* Hallam's Middle Ages. Chap. ix., pt. 2.

established a public bank in 1609. It received coins of all sorts at their weight in bullion, and after deducting as much as was necessary for the expense of coinage and management, it gave credit for the remainder, to the merchant. It was enacted that all bills of 600 guilders and upwards, (afterwards reduced to 300,) should be paid in bank money.

34. The Bank of Amsterdam not only took coin of all sorts from all nations, but in order to encourage and facilitate the trade in bullion, it gave credit in its books for deposits of gold and silver bullion, to the amount of 5 per cent., less than the mint price of such bullion. It at the same time gave a receipt, allowing the depositor of the bullion, or the bearer, to demand the bullion at any time within six months, upon repaying the sum in bank money originally allowed for the bullion, and a small per centage for warehouse rent. In case these deposit receipts were not renewed, the bullion became the property of the bank. These deposit receipts were transferable by delivery, and hence answered the purpose of bank-notes, but as the bank never discounted bills with the coin and bullion in its vaults, they did not add to the quantity of the currency in circulation, and their advantage, like the bank money of Venice, simply consisted in the saving of the wear and tear of the coin and the greater convenience of their portability, as well as insuring a standard for mercantile contracts.

35. Owing to this system the Bank of Amsterdam became the great warehouse for bullion in Europe. It was not instituted originally for profit, but simply to relieve the merchants from the inconvenience of an unfavorable exchange. So great was the confidence reposed in its security, that it became by common consent the centre of the exchanges of Europe. Notwithstanding its

profession that it had in its vaults the coin or bullion represented by every one of its notes or receipts in circulation, it was suspected that it took advantage of its credit, and lent out money at interest. Thus, John Law says:* "By the constitution of this bank, the whole sum for which credit is given ought to remain there to be ready at demand; yet a sum is lent by the managers for a stock to the lumbar (or pawnbroker's shop), and it is thought they lend great sums on other occasions." This conjecture was fully verified in 1796, when the French took possession of Amsterdam, when it was discovered that the bank had lent upwards of 10,000,000 guilders to the government of Holland, and in other quarters, and this caused its ruin.

36. The bank of Hamburgh was founded, in 1619, upon much the same principles as that of Amsterdam; and does not require any particular notice, except that it advanced money upon the deposit of precious stones.

37. About the end of the seventeenth century, there were in the several parts of Europe about twenty-five different institutions named banks, varying more or less in their constitution and modes of doing business, but reduceable to three classes. First, those for the benefit of the income only; secondly, those for the benefit of the safety and convenience of deposits, and for insuring a standard of value in mercantile payments; thirdly, those for safety and convenience, and also for trading and profit.

38. The first class were called *Monti* by the Italians, and would scarcely be called banks by us, as they were nothing but creditors of the state, who advanced money to it upon the security of terminable or perpetual annuities, which were transferable. Commissioners were ap-

* Money and Trade considered, page 66. Edinburgh, 1705.

pointed to receive the revenues and distribute them among the proprietors, and to manage the transferences of the stock. The earliest instance of this is the Bank of Venice; the different loans to the state were called *Monti*, and some writers say that the Bank of Venice was formed by the consolidation of these loans at different periods under one management. Thus, there was the *Monte Vecchio*, the *Monte Novo*, and the *Monte Novissimo*. Of this description were the Banks of Rome, Milan, and one of those at Bologna. These *Monti* did not transact any of what we should call banking business.

39. The second class of banks, which were for the safe keeping of cash, for the insuring of a uniform standard of value, and for the convenience of transferring debts from one account to another, were those of Amsterdam, Rotterdam, Hamburgh, and Stockholm, and that of Venice engrafted this business upon its original constitution. Banks of this description had no shareholders, and were not intended to make any profits beyond what was necessary for paying their expenses.

40. The third class of banks was instituted for the express purpose of trading and profit; and the proprietors, by receiving the money of the public on deposit, and lending it at interest, realised a profit, which they shared among themselves. Of this kind were the banks of Barcelona and Scotland.

41. Lastly, several banks combined the qualities of Nos. 1 and 3, that is, they not only had lent money to the state, for which they received a regular income, but they were allowed to take deposits of cash from the public, and trade with it, and divide the profits among the proprietors. Of this class were the banks of St. George at Genoa, of Naples, and one of those at Bologna, and—the most famous of all—the Bank of England.

42. It is obvious that the banks of the latter class comprehended also some of the qualities of those of No. 2. And if the notes of the Bank of England had been promises to pay a certain *weight* of bullion, instead of merely so many pieces of the currency, it would have combined the qualities of all three classes. None of these continental banks issued paper upon their own credit, or upon any other basis than gold and silver actually deposited with them, so that they did not in any way add to the quantity of the currency. We have now to describe the origin of banking, in a country where it received a much greater development, than in any of the preceding ones, and has been reduced to a system of much greater perfection than in any other, and where it may almost be said to have become a new science.

43. It is true that the Bank of England was instituted one year earlier than the Bank of Scotland, but we shall reserve an account of its foundation till the next chapter.

44. The accounts differ as to whom the merit is due, of establishing the Bank of Scotland, for while some say that it is due to William Paterson, the originator of the Bank of England, and the Darien Company,* others say, that a merchant of London, Mr. John Holland, was its projector.† It is the first instance in the world of a private joint stock bank, formed by private persons for the express purpose of making a trade of banking, wholly unconnected with the State, and dependent upon their own private capital. It therefore differs in kind from any we have hitherto mentioned, and we shall now proceed to trace its history somewhat minutely, as well as the banking system in Scotland, as since the expiration of a short

* Macpherson's History of Commerce. Vol. II., p. 664. Buchanan's History of Scotland, continued by Aickman.

† Macculloch's Literature of Political Economy, p. 161.

time, granting that bank a monopoly of banking in Scotland, it has never been fettered with the restriction, which the services of the Bank of England to the State enabled it to procure to be imposed upon English banking. The Scottish system therefore, free from the oppressive monopoly, which weighed down the business in England, was moulded into its present state, by the intelligence of practical men.

45. The Act authorizing the Crown to grant a Charter of Incorporation to the Bank of Scotland, was passed by the Scottish Parliament, on the 17th July, 1695.* The principal provisions of this Act, were as follows:—

I. The joint stock was to be £1,200,000 Scots, or £100,000 Sterling, and authorizes certain persons to receive subscriptions for not less than £1,000 Scots, (£83 6s. 8d.) nor more than £20,000 Scots (£1,666 13s. 4d.) for each person, with a deposit of 10 per cent.

II. They were allowed to lend on real or personal security, at not more than 6 per cent., and in failure of payment, to sell or dispose of the security publicly.

III. They were allowed to transfer their stock, freely, or by will.

IV. No dividend to be made but by consent of general meeting.

V. The joint stock to be free from all taxes affecting money for 21 years from that date.

VI. It was declared to be illegal for any other company to set up banking for 21 years.

VII. Various legal privileges were granted for the more speedy and effectual recovery of debts due to the bank.

VIII. Prohibiting any sum to be withdrawn from the joint stock.

IX. Prohibiting the Company directly or indirectly from using or employing the joint stock of the bank, or any of its profits, in any other trade of commerce, except the trade of lending and borrowing money upon interest, and negotiable bills of exchange.

* Acts of the Parliament of Scotland. Vol. IX., p. 494.

X. Prohibiting the company from purchasing land or heritages, or advancing money to the Government upon the anticipation of any sums to be granted by Parliament, except only those particular ones upon which a credit of loan should be authorized by Parliament, under the penalty of forfeiting triple the amount, of which one-fifth to the informer.

XI. All foreigners who subscribed to the joint stock, were *ipso facto* naturalized to all intents and purposes.

46. Soon after its establishment, the bank began to issue notes for £100, £50, £20, £10, and £5; but though they had many proposals for issuing tokens below £5, to supply the want of a circulating medium, they always declined to venture upon so novel an experiment till 1704.* The circulating medium is supposed to have been about £1,000,000 in coin at that period, but there were great complaints of the restraint upon the commerce and agriculture of the country for want of a circulating medium.

47. This bank introduced some essentially new features into the business of banking, distinct from those of any other bank we have been considering. As it was purely a trading company, not instituted for any state purpose, and with its security not guaranteed by any state revenues, but depending entirely upon the subscribed joint stock of its proprietors, it became necessary that it should make a profit by its business sufficient to pay the usual interest upon the stock and indemnify the proprietors for the risk they ran. It was not restricted as to the amount of its issues, like the foreign banks, but it was left at full liberty to act according to its own discretion, and might issue as many notes as the public were willing to receive. It issued notes upon the basis of its

* Report of Committee of House of Lords. Kinnear's evidence, p. 153.

own credit, which always passed for, and were equivalent to, coin in the public estimation. To increase the circulation of its notes, and to add to the banking accommodation of the country, it devised the system of establishing branches in the leading towns of Scotland soon after its foundation. So that, having once secured a monopoly in its favor, it endeavoured to perform the reciprocal duty of extending its utility as much as possible; for each of the towns in which it established a branch had all the advantages of a bank of its magnitude and security, at a moderate rate of interest, when their own local transactions would never have been sufficient to defray the expenses and necessary profits upon a bank with independent capital of its own. In the miserable state of the country, however, at that time, it was found that these attempts were premature. The bank had established agencies, in 1696, in London, at Glasgow, Aberdeen, Dundee, and Montrose; but the expense of these branches far exceeded the advantage, and they were given up after a short trial. In 1731, another trial was made, and agents were appointed at Glasgow, Aberdeen, and Dundee, but, after a trial of two years, were discontinued. The plan was not attempted again till 1774.*

48. This bank does not seem to have received deposits from the public at first, but contented itself with issuing its own notes upon the security of the subscriptions, or joint stock, of its proprietors. It soon rose into great credit and repute. John Law, writing in 1705,† says:—

"The fund of the bank of Scotland was £100,000, of which a tenth was paid in. This bank was safer than that of England,

* Second Report on Banks of Issue, 1841, p. 301.

† Money and Trade considered, p. 69.

there being a register whereby most sums lent were secured Its notes went for four or five times the value of the money in bank, and by so much as these notes went for more than the money in bank, so much was added to the money of the nation.

"This bank was more useful than that of Amsterdam or England; its notes passing in most payments, and through the whole country; the bank of Amsterdam being only for that town, and that of England of little use but at London."

49. In the year 1704 the bank had the misfortune to stop payment. It appears that the Scotch had been buying goods freely, more than they could pay for with their manufactures, which caused an unfavorable exchange, and a great export of specie, which inconvenienced the bank. It then hit upon the plan of £1 notes, which served to supply the demand for a small currency; and by this means the bank might have kept its credit, when a report was spread that the money was to be raised by proclamation, which caused a run upon it, and in a few days compelled it to stop payment.

50. We may, perhaps, surmise that this mishap was brought about by an over-issue of paper, and by not perceiving that a paper currency must have a certain proportion of metallic currency circulating along with it to maintain its credit. The same writer says:* "As credit is voluntary, it depends on the quantity of money in the country, and though the bank had never failed (*i. e.*, at that time), yet it could not have kept its credit much longer, because the quantity of money in Scotland is not sufficient to give a circulation to such a sum of notes as will pay the charges of the bank and the interest to the owners."

51. Influenced probably by this consideration, the

* Money and Trade considered, p. 108.

bank began to receive public deposits, in 1707, upon which it gave no interest. In 1699 the rate of discount was 8 per cent. for bills above £50, and 12 for those below that sum; in 1706 this rate was reduced to 6 per cent., and in 1715 to 5.* Notwithstanding the impulse given to the trade and commerce of the country by the establishment of the bank, it continued for a long time to be limited in its operations, and, in 1725, there were such great complaints of the scarcity of money in the country, that loans were obtained with great difficulty, even for small sums, and no regularity was observed in payments.†

52. The first charter of the Bank of England created no monopoly in its favor; on the contrary, it was the intention of the Government to establish another bank, and the failure of its promoters to subscribe the stock they had undertaken to do, greatly embarrassed the Government. It was the great services rendered to the Government that enabled it to secure that fatal monopoly which was the cause of so many subsequent disasters in England. Fortunately for the country the Bank of Scotland was a mere private joint-stock bank, perfectly unconnected with the Government, and most happily it had not only rendered the state no service, but its directors labored under the imputation of disaffection to the house of Hanover. Consequently, when the monopoly created on its behalf expired in 1726, it was not renewed; and in 1727 a rival bank was erected by charter, and called the Royal Bank. So that the spirit of Jacobitism, among the numerous calamities it brought upon the country, had

* Second Report on Banks of Issue, p. 302.

† Parliamentary History, Vol. XXXIII., p. 378. Speech of Sir W. Pulteney.

at least this redeeming advantage, that it crushed the monopoly in banking.

53. This bank was set up in the interest of the Hanoverian Government, and in order to provide funds for its capital, they remitted certain taxes, to which by the union Scotland was to become liable.* The new rival was of course regarded with the utmost jealousy and alarm by the Bank of Scotland, but happily this soon wore off, as it was discovered, that so far from injuring it, the inevitable consequence was produced which enlarged experience in the commercial world would enable us to predict; it increased the prosperity of both of them, so that the stock of the Bank of Scotland, which had never been at much premium, rose afterwards to 400 per cent., and the stock of the new bank rose very high.†

54. The Royal Bank had only been in existence two years when it invented a further development of and extension of the banking system, which by the unanimous testimony of all persons who know that country, has done more to develope its resources and promote its agricultural and commercial prosperity, than any other cause whatever. This is the system of *cash credits*, or *cash accounts*. This system requires the most attentive consideration, because it is entirely of the nature of *accommodation paper*, which has fallen into such disrepute in England from the enormous abuse of it that has taken place.

55. The chief method adopted by banks in those days for making loans was by way of discount; but in the contracted sphere of Scotch commerce at that time, when Glasgow did not contain above 10,000 inhabitants, and could not support a single branch bank, there was little

* Parliamentary History, Vol. xxxiii, p. 379. Speech of Sir W. Pulteney.

† *Ibid.*

field for making profits by negociating bills of exchange, it was necessary, therefore, to devise other expedients for getting their notes into circulation, and this gave rise to the cash credit system.

56. Every man in business, however humble, or however extensive, must necessarily keep a certain portion of ready money by him, to answer immediate demands for small daily expenses, wages, and other things. This of course would be much more profitably employed by being invested in his business, where it might produce a profit of 15 or 20 per cent., instead of lying idle. But unless the trader knew that he could command it at a moment's notice, he would always be obliged to keep a certain portion of capital unemployed. The trader must always keep a certain portion of ready money in his own till, or he must be able to command the use of somebody else's till. Now the true and legitimate object of a cash credit is to supply this convenience to the trader, to enable him to invest the whole of his own capital in business, and upon proper security being given, to furnish him with the accommodation of a till, where he may obtain ready money, at a moment's notice, in such small sums as he may require, on his paying a moderate interest for the accommodation.

57. A *cash account*, or *cash credit*, is a permission granted by the bank to any person, to draw upon it to a certain limited amount, at any time, and in such sums, as may suit the convenience of the party, and he may pay in day by day such sums as he pleases, as the interest is charged upon the daily balance of the account. It is only granted on the security of two, or often more co-obligants with the party himself.

"The great purpose of cash accounts is to assist the capital of individuals. In no case are they granted for the purpose of afford-

ing capital, unless it may be in the case of persons not engaged in trade, who may have occasion for ready money from day to day, such as a writer to the Signet, beginning business, who has occasion to make many small payments. But in general they are granted to persons possessed of capital, merely for the purpose of aiding them with the means of meeting their daily payments, and when they are granted, there is the greatest regard had in the first place to the character and habits of the applicant, to the purposes to which he can beneficially apply the cash account, and more especially to the means which he has of promoting the circulation of the bank-notes, particularly of the 20s. and 21s. notes.*

58. The chief object of the Bank in granting these accounts, is to promote the circulation of their small notes. They are, therefore, not to be considered as permanent loans; but their very essence is, that the operations upon them should be as frequent as possible. The bank always reserves to itself the power of calling up any balance that may be due, and closing the account if it becomes inoperative.

"As soon as they fail of accomplishing the purpose for which they are granted, the banks withdraw them."

"It is quite necessary, in order to render a cash account beneficial, that there should be continued and repeated operations upon it; that the transactions should be numerous; that there should be a constant drawing out and paying in of money; and that by these means a circulation of the bank notes may be promoted. Otherwise the account is withdrawn; and the great reason of this is that these accounts are not intended to form dead loans, but to be productive of circulation to the bank."†

"To secure to the bank the advantage of circulation, which is to make it worth while to afford these facilities at so little expense to his customer, he, on his part, is to lose no opportunity of bringing to the bank, and thus withdrawing from circulation the notes of

* Report of Committee of House of Lords on the State of the Circulation of Scotch and Irish Notes. Evidence of Rob. Paul, Esq., p. 118.

† *Ibid*, p. 120.

every rival bank which come into his hands in the course of his transactions, or of paying away, and thus introducing into circulation, as many of the notes of the bank as his transactions admit of—always £1 notes if possible. The bank places several checks upon such accounts, of which the principal is, that the payments and receipts must be frequent; for in this consists the banker's profit, inasmuch as the payments are uniformly made by him in his own notes, and the receipts are generally in a very great degree in the notes of other banks. * * * In effect, the bank becomes to the shopkeeper a sort of distant till, in one drawer of which he places all the money which comes in, while from another drawer he is supplied with that which he requires to pay away; and he can calculate on the loan of a small sum of money whenever he wants it. But if he permits that to become a dead loan, by making no fresh operations on his account for a time—say a few months—the bank not deriving the advantage which it expected, immediately recals its advances, and closes the account."*

59. As the principle of these accounts is only to supply the necessary daily payments of traders and others, which in ordinary cases cannot be very great, the banks are averse to granting them to a large amount. They much prefer to have ten cash credits of £100 each, to one of £1,000, so that they are quite as much for the advantage of the poor as the rich.

"Cash accounts for small sums enable the poor to be as instrumental, so far as their means go, in increasing the capital of the country as the rich are; for the produce of that industry which cash account credits enable to operate, and of that capital which they leave at liberty to be employed in trade, goes to increase the real wealth and capital of the country; and a great proportion of the transactions carried on through the instrumentality of cash accounts consists of those of the poorer classes.

"When the system is applied to the case of large manufacturers, employing hundreds or thousands of workmen, and possessing a cash credit to a proportionate amount, upon sufficient security

* Report of Committee of House of Lords on the State of the Circulation of Scotch and Irish Notes. Evidence of T. Kinnear, Esq., p. 154.

(and it is generally to such parties that large cash credits are given), one obvious effect is, that the temptation is removed from the manufacturer to issue notes and become himself a banker—an error or temptation which, if what is said be true, has been a main cause of many insufficient English country banks, whose partners, from being good traders, became bad bankers, and brought upon their own district the distress which bad banking always produces sooner or later."

60. These cash credits are granted to all classes of persons, to industrious traders, or farmers, or merchants, manufacturers, professional men, or landholders. The advantages, in a pecuniary sense, to the borrower are that after the permanent credit is given, the option of using it lies solely with the borrower, not with the bank, as does also the option of the period of repayment. That the borrower pays only simple interest, not discount interest, upon the advance to him. That the repayment, as well as the overdraft, is permitted by the bank to be made in small sums piecemeal, so that by attention in his repayment, the borrower saves himself from paying interest on more than the precise advance for which he has occasion at the moment, and can constantly convert to a safe and profitable purpose the money which he may receive in the course of his trade, however small the amount.*

61. As the sureties have it always in their power to withdraw whenever they please, this system has a great effect in making them exercise a moral check over those for whom they become bound.

"The practical effect of which is that the sureties do in a greater or less degree keep an attentive eye upon the future transactions and character of the person for whom they have thus pledged themselves; and it is perhaps difficult for those who are not intimately acquainted with it to conceive the moral check which is

* Report of Committee of House of Lords on the State of the Circulation of Scotch and Irish Notes. P. 154.

afforded upon the conduct of the members of a great trading community, who are thus directly interested in the integrity, prudence, and success of each other. It rarely indeed, if ever, happens that banks suffer loss by small cash accounts.

"Another effect of these accounts, inasmuch as they depend upon a repetition of small transactions, is, while they increase the banker's security, also to increase his assiduity and attention, and to bring under his notice the daily transactions, that is the whole business of his customers, by which means he may become an almost unerring judge of their stability."*

62. The witnesses whose evidence we have quoted stated that they calculated that the numbers of persons who had cash credits granted to them amounted to about 10,000 or 11,000, and as the average number of securities to each bond might be taken at 3, there were about 30,000 persons interested as securities; so that the total number of persons at that period (1825) who were interested in the system was at least 40,000; and we may suppose that the number must have considerably increased since then. The banks were then supposed to be under engagements of that sort to the amount of about £6,000,000, of which about two-thirds were drawn out.

63. It is evident that in the cases of tradesmen, professional men, and merchants, which have been already noticed, the system of loan by cash credits is applicable to a totally different class of transactions to that of discounting bills. The system has also been applied to another very large interest which has conduced more than anything to advance the prosperity of Scotland, viz., the agricultural. In the Scottish system of farming, leases almost universally prevail, and a farm is not entrusted to the hands of a man who is not thoroughly educated to his

* Report of Committee of House of Lords on the State of the Circulation of Scotch and Irish Notes. P. 155.

business. He usually enjoys nineteen years security of tenure; or where leases are granted for the purpose of reclaiming land, they are frequently longer than that. Now, supposing a farmer who is known to be active, skilful, and industrious, obtains a farm upon lease, he may go to the bank, and upon the security of his lease and some friends who become bound for him, the bank grants him a cash credit. He accordingly is able to invest the whole of his own capital in improving the land, and obtains any temporary advances he requires to make immediate payments with, from the bank. When the harvest is gathered he repays the bank with interest, makes a profit for himself, and adds to the capital of the nation. This is an example of common occurrence in Scotland, and a very large proportion of the cultivation of the country owes its origin to this system of cash credits.

64. This system of cash credits sprung from the peculiarity in the original constitution of the Scotch banks; *they had no limitation to the amount of notes they might issue.* All other banks merely issued notes or receipts for the coin or bullion deposited with them, and in the case of the Bank of England, they were strictly forbidden under heavy penalties, from issuing notes or bills to a greater amount than their subscribed capital, which was advanced to Government.* No such limitation was imposed upon the Bank of Scotland, which was a purely private concern, nor upon any other Scotch bank. They were therefore able to issue as many notes as the public were willing to receive, and are the first instances of Banks of Credit.

65. Being then the first institutions of this nature,—that is, being the first that adopted the practice of putting more paper into circulation than they had actual coin to

* Statute 1694. Chap. xx., sec. 26.

represent,—this is a fitting opportunity to examine the application of Mr. John Stuart Mill's and Mr. Macculloch's views, regarding credit to them. But we must first quote a passage from Adam Smith. He says:*—

"The increase of paper money, it has been said, by augmenting the quantity, and consequently diminishing the value of the whole currency, necessarily augments the money-price of commodities. *But as the quantity of gold and silver which is taken from the currency* IS ALWAYS EQUAL *to the quantity of paper which is added to it,* paper money does not necessarily increase the quantity of the whole currency."

66. If this paragraph had been written by a person who had no experience of banks except those of Venice or Amsterdam, we should not have been surprised at it, though the looseness of the expression might have been commented upon; for if the quantity of coin that is taken away be *always* equal to the quantity of paper that is added, the result as to the quantity of the currency must necessarily be the same. In such a case, therefore, paper not only did not *necessarily* increase the quantity, but it could not by any possibility do so. To say that it could do so, by any possibility, is to say, that if we first subtract 3 from 12, and then add 3 to 9 the result *may be* 13. Passing over, however, this inaccuracy of idea, we cannot help expressing our astonishment, that so acute a man as Adam Smith, who was living in the very country of paper credit, who had it daily before his eyes, should make the astounding error of saying that the quantity of paper in circulation was only of EQUAL amount to the gold and silver it displaced!! Within twelve lines of the passage we last quoted he says:—

* Wealth of Nations.—On Metallic and Paper Currency. Book II. chap. ii.

"In 1751 and 1752, when Mr. Hume published his political discourses, and *soon after the great multiplication of paper money in Scotland*, there was a very sensible rise in the price of provisions, owing probably to the badness of the seasons, and not to the multiplication of paper money."

Did he mean in the latter passage to say, that this great multiplication of paper money only replaced an equal quantity of gold and silver? In a previous part of the same chapter he estimates the gold and silver coin in circulation at the Union at £1,000,000 sterling; at the time he was writing he estimates the whole of the currency of Scotland at two millions, of which "that part which consists in gold and silver most probably does not amount to half-a-million." Now from this statement, (assuming it to be true,) is it not absolutely clear that the effect of introducing a paper currency had been to drive out one half of the previously existing metallic currency, to replace that amount by paper, and to *add* a million of paper besides? Hence, by his own showing, the paper currency was three times the amount of the metal which it had displaced. It is these amazing contradictions and oversights which detract so considerably from the value of Adam Smith's great work, notwithstanding the excellent style in which it is written.

67. We may now consider the effect of the institution of a bank of credit, by which we mean one that is allowed to issue notes without any limitation, in a country where nothing but a metallic currency was in circulation. It is quite clear that the joint stock and the first deposits from customers in the bank must be in this metallic currency. But it will endeavour to make all payments, all advances, and loans of every description, in its own notes.

68. A little experience in a bank shews that the

sum paid out of it daily will bear a pretty constant ratio to the sum paid in, and the amount of deposits in it. We may, therefore, not inaptly consider this part of the deposits to be in a state of constant revolution. The magnitude of the sum which is thus operated upon depends entirely upon the customers of the bank, *i.e.*, those who deposit their funds in it, and the bank has no control over it. It is true that it is possible that a demand might be made upon it for the whole of them in a single day, but that is so remote a contingency, except in the event of some public calamity, or fear of its failure, that it may be safely left out of calculation. Under ordinary circumstances, the sum daily demanded may be calculated with as much certainty as the tables of mortality, the occurrence of fires, or any other subject of insurance; and if the bank allows a liberal margin for contingencies, there will certainly be a considerable sum at its disposal, or a dead rest beyond the circumference of this wheel of revolution, if we may so call it, which may be employed in any profitable manner that may be deemed advisable.

69. There is no method of doing this in so secure and profitable a manner as lending it out for certain short and definite periods at good interest, on some security which can be readily converted into money in the event of any sudden and unforeseen demand for cash. The most usual and eligible species of securities which a bank invests its deposits in, beyond those required to meet the daily drafts of its customers, are bills of exchange. To present this consideration in as simple a view as possible, let us assume that all the bills it discounts have exactly ninety days to run. Then if the bank purchases, for ninety days in succession, bills to the amount of one-ninetieth part of the deposits it thinks prudent to use in this manner, it is clear that on the ninety-first day the

money paid for the first of the series will be returned to it (the interest having been retained beforehand), and will be available to purchase another batch of bills of equal amount, and so on in succession. Thus, this portion of the deposits will constitute a second circle of revolution distinct from the first. We thus observe, that the deposits in a bank which transacts such a business, form two perfectly distinct wheels of revolution, independent of each other, over one of which the bank has no control, namely, the payments in and out of its customers; the other over which it has control and can always contract when it pleases, namely, its advances. As long as these wheels revolve without coming into contact, all goes well; but if they are enlarged too much and come into collision, it will produce a temporary stoppage, which may become permanent, and care must be taken to prevent them approaching each other too closely.

70. We have already seen of what great benefit a bank of discount is to commerce which employs nothing but coin in its operations. But, however advantageous it may be, there is a very manifest limit to its powers of utility, which is, the deposits left with it by the public; and the only increase that can take place is by inducing the public to intrust it with a greater amount of deposits.

71. Such is the case when the bank only issues the coin it received from its customers. But if it is allowed to issue its own notes it will of course endeavour to do so on all occasions. While the system was novel, and the bank, perhaps, not firmly established in public estimation, many customers might refuse to take them, or, if they did, the first person who received them in payment would go to the bank and demand gold for them; and the bank

would have to keep a stock of gold for the special purpose of meeting the demands that might be made upon them for payment of their notes. But this would wear off in time, as the notes became better known, and the bank more firmly established, till at last the demand for gold in payment of its notes would cease altogether, except on rare occasions, such as persons going abroad, or purposes of that nature, and consequently, as it would be like the den of Cacus, all the gold would go in and none of it come out, in a less or greater period the gold would disappear from circulation and paper be substituted. Now, when this process had reached this length, it is clear that the paper in circulation would exactly equal in amount the gold it had displaced; and the great error of Adam Smith and Mr. Loyd, which we have noticed, is, that they imagine the issues of paper would stop when they reached this length; whereas, not only is there no necessity for such a thing, but it is quite certain that they will not stop there.

72. This is what actually did happen in Scotland. Long before Adam Smith's time the whole of the gold coinage had disappeared from circulation, and a considerable amount of the silver. But the banks did not confine themselves to issuing only notes in lieu of the gold which had found its way to their own cellars. On the contrary, they greatly exceeded it. When they had an unlimited power of issuing notes, their operations were not controlled by the actual amount of deposits they had; but, after a short experience, they could ascertain what was the average amount of their notes that would be returned on them for payment in gold, and consequently that would be the limit which was necessarily imposed upon their issues. With this unrestricted power of manufacturing capital, whenever any proposition for an

advance was brought before them, the only considerations which they had to attend to were,—first, the character and business habits of the person who made the application; secondly, the merits of the business which was sought to be promoted; and thirdly, the probable amount of notes that would be returned on them for payment in gold. They had, therefore, nothing but their own prudence to control them in making these issues. Now, we have seen that the circulation of coin is multiplied by a bank which discounts mercantile bills. Now it necessarily follows, that if the basis of capital be multiplied by extending the issues of notes instead of gold, the power of discounting is also multiplied in the same proportion; and hence we may see what an enormous amount of circulation may be built upon any given amount of metallic basis, by the double operation of issuing bank-notes and discounting bills.

73. The deposits in a bank can only arise from the slow growth of the savings of its customers, and they are what truly constitute the banking capital of the bank, and it is by trading with them that the bank makes its profits. The *profits* only are the property of the bank, which is always a debtor to its depositors for the amount of their deposits. Now, if a bank can maintain its paper in circulation, its profits are exactly the same as if it put in circulation the deposits of its customers. When it issues paper it is a debtor to the holders of its notes for their amount, and when the notes are returned to it they are valueless, but that debt is extinguished. It follows from this, that by issuing its notes a bank anticipates the increase of its deposits, and that all the notes it can maintain in circulation are as much banking capital as the deposits of its customers in coin.

74. Adam Smith says most truly,—

"A paper money consisting in bank notes issued by people of undoubted credit, payable on demand, without any condition, and, in fact, always readily paid as soon as presented, is in every respect equal in value to gold and silver money; since gold and silver money can at any time be had for it. Whatever is either bought or sold for such paper, must necessarily be bought or sold as cheap as it could have been for gold and silver."*

75. Although only the portion of the notes issued by the bank in excess of the actual deposits held by it are, strictly speaking, what it issues upon credit, we may say that the whole of its paper circulation is maintained by its credit. When people receive bank notes in payment of their services or commodities, it is only because they believe that they can always get the actual coin, immediately they demand it; now, it is quite impossible to discriminate among the holders of the bank notes, those whose notes represent the actual coin, and those which represent the excess above the coin, we must therefore designate them all by the same name, either they are all capital, or they are none of them capital. And we are quite willing to leave it to the common verdict of intelligent men of business to say whether or not *credit is capital.*

76. The power of a bank, then, to issue notes to an unlimited extent, is in its practical effects exactly equivalent to an increase of deposits. It is this power of anticipating deposits which has served as the foundation of the other great distinguishing feature of the Scotch system of banking, namely, the establishment of branches of the parent institution in other towns and districts. And the operation of these branches is another test of the question whether or not credit is capital. Let us suppose

* Wealth of Nations. Vol. II., p. 332. Wakefield's Edit.

that there is a tract of uncultivated, or unreclaimed land, which is, however, capable of being cultivated; let us suppose that there are a number of people living in its neighbourhood, sunk in poverty and misery from having no one to employ them; suppose that a bank, seeing this state of things, plants a branch in this tract of country, and a number of poor, but skilful and industrious farmers settle there, and take leases of portions of this uncultivated land. The bank agrees to advance them a number of its notes. With the advances so made the farmers engage the poor people as laborers, and in a very short time that which was a moor and a waste is covered with fields of waving corn, and turnips and potatoes, affording sustenance to a large population, and cattle, and the excess of its produce over what is required for their support is exported abroad, and brings all sorts of foreign commodities in exchange.

77. Now, what was the foundation of all this? It was the moving power supplied by the bank. And of what did this moving power consist? CREDIT—absolutely nothing but *credit*. And was not this credit *capital?* Were not these bank-notes, which had no other power to give them currency but the voluntary acceptance of the people and the confidence they reposed in the bank, to all intents and purposes, as efficacious and useful as if they had been gold and silver? Now, it is a notorious fact that an immense proportion of the cultivation and manufactures of Scotland have been called into existence by this system. The far-famed agriculture of the Lothians, the manufactures of Glasgow and Paisley, the unrivalled steam-ships of the Clyde, are nearly all the children of credit. Now, will any man who is conversant with these facts, with these results staring him in the face, agree with the extraordinary paradox of Mr. Macculloch, who

says, that *credit conduces nothing to the increase of wealth?* or, will he join with Mr. John Stuart Mill, in condemning the "confused notions" and "exaggerated language" of those who maintain that extension of credit *is* equivalent to a creation of capital, and that credit *is* capital; and that it is not too bold a metaphor to say, that credit *does make something out of nothing?* It is just as certain as anything in existence, that it is nothing but the circulation of a few bits of paper, bearing "promises to pay" upon them, that calls into existence property and commodities to the value of many millions in Scotland.

78. We shall not be surprised at Mr. Macculloch's sentiments upon this subject if we examine his views regarding money in another place:—*

"Inaccurate notions with respect to the influence of coinage seem to have given rise to the opinion, so long entertained, that coins are merely *signs* of value. But it is clear they have no more claim to this designation than bars of iron or copper, sacks of wheat, or any other commodity. They exchange for other things because they are desirable articles, and are possessed of real intrinsic value. A draft, check, or bill, may not improperly, perhaps, be regarded as the sign of the money to be given for it; but that money is nothing but a commodity, it is not a sign—it is the thing signified."

79. We should be sorry to imagine that this sentiment would meet with general approval at the present day. If it were so, political economy has wonderfully retrograded since the days of Adam Smith. We emphatically deny that a coin is to be considered in the same light as a sack of wheat. If we buy a sack of wheat, we do so because it possesses certain known qualities which are directly useful to us; we therefore buy a sack of

* Commercial Dictionary, article *Money*, p. 865. Edition, 1854.

wheat for its own sake. But we do not seek to obtain coin for its own sake, it is not capable of being put to any useful purpose directly; but we strive to obtain coin for the sake of the power it confers upon its possessor of obtaining anything else that may suit his fancy, for the sake of the power it has of commanding the services of others; and if anything else besides coin possessed that same power it would be equally desirable with the coin itself. If the same number of persons would give exactly the same amount of their services or productions for a bank-note as for a gold coin, then a bank-note would be in all respects as desirable an object as a gold coin. If people refuse to accept gold coin for their services or commodities, then gold would be equally valueless with the commonest piece of paper. Adam Smith says most truly:—

"A guinea may be considered as a bill for a certain quantity of necessaries and conveniences, upon all the tradesmen in the neighbourhood. The revenue of the person to whom it is paid, does not so properly consist in the piece of gold, as in what he can get for it, or in what he can exchange it for. If it could be exchanged for nothing, it would, like a bill upon a bankrupt, be of no more value than the most useless piece of paper. * * * * * Though we frequently, therefore, express a person's revenue by the metal pieces which are annually paid to him, it is because the amount of those pieces regulates the extent of his power of purchasing, or the value of the goods which he can annually afford to consume. We still consider his revenue as consisting in this power of purchasing, or consuming, and not in the pieces which convey it."*

So again he says:—

"Though the wages of the workman are commonly paid to him in money, his real revenue, like that of all other men, consists

* Wealth of Nations. Vol. II., p. 274. Wakefield's Edit.

not in the money, but in the money's worth, not in the metal pieces, but in what he can get for them."*

Again:—

"It would be TOO RIDICULOUS to go about seriously to prove that wealth does not consist in money, or in gold and silver; but in what money purchases, and is valuable only for purchasing. Money, no doubt, makes always a part of the national capital, but it has already been shewn, that it generally makes but a small part, and always the most unprofitable part of it."†

So also Mr. Thornton:—

"Money of every kind is an order for goods, it is so considered by the labourer when he receives it, and is almost instantly turned into money's worth. It is merely the instrument by which the purchasable stock of the country is distributed with convenience and advantage among the several members of the community."‡

Lastly, expressing the identical sentiment of these paragraphs, there is the proverb of that people who were the original leaders in all the wisdom of modern Europe, the Italians,—"*oro è, che oro vale.*" "The money's worth is the money.

80. Considering, then, that gold and silver coin is merely the embodiment of the idea of the power of commanding services, which is generally received, it follows that if people are quite as willing to give services and commodities for paper notes, which depend upon credit, these paper notes are the embodiment of the same idea as the gold and silver coin, and are in all respects to be treated precisely in the same way as coin, so long as they meet with this general acceptance.

81. This cash credit system, then, was a system of

* Wealth of Nations, Vol. II., p. 283. Wakefield's Edition.

† *Ibid.*, Vol. III., p. 84.

‡ Inquiry, &c., p. 260.

pure credit, of pure accommodation paper; but it was generally used with such discretion, that, after having examined witnesses very fully upon it, the House of Lords reported:—

"There is one part of their system, which is stated by all the witnesses (and, in the opinion of the committee, very justly stated) to have had the best effects upon the people of Scotland, and particularly upon the middle and poorer classes of society, in producing and encouraging habits of frugality and industry. The practice referred to is that of cash credits. * * * From the facility which these cash credits give to all the small transactions of the country, and from the opportunities which they afford to persons who begin business with little or no capital but their character, to employ profitably the minutest products of their industry, it cannot be doubted that the most important advantages are derived to the whole community."*

82. The testimony of every one who has any experience of Scotland is unanimous in favor of the remarkable effects this system has had in promoting the prosperity of the country, and the morals and conduct of the people. It is no exaggeration whatever, but a melancholy truth, that at the period of the revolution of 1688, and the establishment of the bank of Scotland, that country, partly owing to such a succession of disasters as cannot be paralleled in the history of any other independent nation, and partly owing to its position in the very outskirts of the civilised world, and far removed from the humanising influence of commerce, was the most utterly barbarous, savage, and lawless kingdom in Europe. And it is equally undeniable that the two great causes of her rapid rise in civilisation and wealth were

* Report of the Committee of the House of Lords to inquire into the Irish and Scotch circulation, 1826, p. 4.

her systems of national education and banking. What the river Nile is to Egypt, that is the banking system to Scotland, and it was fortunate for her that the foundations of her prosperity were laid broad and deep before the gigantic fallacy was dreamt of, that the issues of banks should be inexorably restricted to the amount of the gold coin they displace.

83. From the nature of cash credits, it is evident that they are for the purpose of paying a multitude of small sums to different individuals, and the cheaper a bank can supply the requisite currency, the more reasonable is the sum which they can charge their customers as the price of the accommodation. They were specially contrived for the purpose of circulating the £1 notes, and from their very nature, notes of a larger amount would be of very little service; indeed, we may say, that they are totally inapplicable to them. So that, whenever a bank grants a cash credit it must be prepared with a considerable quantity of small change at any moment. When this small change consists merely of the bank's own notes, produced at a trifling expense, and of which it can keep any amount in its own coffers ready for use, it can grant cash credits upon very moderate terms. Accordingly, the Scotch banks did not charge any commission on the amount of the credit, but only interest at the market rate upon the actual daily balance, at the debit of the customer, until the Act of 1845 compelling them to invest a larger quantity of their capital in gold. When this power of issuing its own notes is taken away, and the currency of the bank is obliged to provide gold and silver, it is impossible to grant these credits upon such favorable terms. Every pound of deposits the bank keeps unemployed is a dead loss to it. Hence, all the witnesses examined before the Committee of 1826 con-

sidered the cash credit system so vitally interwoven with the £1 note currency, that they unanimously declared that it could not be continued if the £1 notes wer abolished. This opinion, notwithstanding the unanimity of the witnesses, and their undoubted experience and ability, does not seem to be conclusive, as it is in truth simply a matter of calculation of profit. It is certainly true, that when a bank has no power of issuing notes it must necessarily make higher charges than when it has that power. But the question is, whether those advanced charges which it must necessarily make when it can issue nothing but gold and silver will answer the purpose of the customer? and it will, probably, be found, that the convenience of a cash credit is so great to every one who understands and applies it to its proper purpose, that it is worth far more than any charges which will remunerate the bank. Since the Act of 1845, some, if not all of the Scotch banks have found it necessary to make a small charge for commission on the amount of the credit, as well as upon the actual advance.

84. Cash credits do not differ in their nature from *over-drafts*, which are extensively practised by English private bankers, only that they are reduced to a much more regular system, and are governed by their own methodical rules, and are appropriated to certain particular purposes in the banking system. The very extent to which over-drafts prevail, which form the staple of a great proportion of English country banking business, is a proof that cash credits may well exist without a £1 note currency.

85. While, however, we maintain, that so long as people give their services and commodities for paper which depends upon credit, as freely and willingly as for gold coin, it is to be treated as exactly equivalent to coin,

because it possesses identically the same moving power that coin does, and is entitled to be considered as capital in every respect as much as coin, it is clear that if it be issued in too great excess it ceases to possess the same moving power as coin. Moreover, the credit it enjoys, and the transferability, which is the only thing that makes it useful, depends entirely upon the confidence which people have that they can obtain coin for it immediately on demand, without the slightest delay or the slightest obstruction. When this is the case it will circulate at par; but if any obstruction or delay be interposed to prevent the holder of it from obtaining the coin at the instant he demands it, the delay or obstruction with which it is clogged operates as a disadvantage, and paper which is subjected to this deteriorating influence cannot be so desirable as paper which is not. It will consequently and inevitably fall to a discount.

86. The unlimited power of issuing "promises to pay" which was placed in the hands of two hostile and rival parties, who had the management of the two Scotch banks, without any check being devised to regulate them, must, we know from our experience in such matters, have led to the most flagrant abuses. To protect themselves from the consequences of these over-issues, the Bank of Scotland in 1730 introduced a clause into their notes, making them payable at the option of the directors of the bank, at the end of six months, with a sum equal to the legal interest from the demand to that time.* This practice spread through all the other banking companies, for the manifest advantages of banking were so strikingly displayed that after the expiring of the monopoly of the Bank of Scotland, banking companies started up in all directions, and inundated the country with notes. When

* Second Report of Committee on Banks of Issue, 1841. P. 303.

the holders of the notes demanded payment for them, the directors of the companies threatened that they would take advantage of the optional clause, unless the demanders would content themselves with a part of what they wanted;* moreover, there being no restraint upon the amount of the notes, many of the companies issued 10s. and 5s. ones, and even lower than that. In Perthshire, there were notes for 1s., and even for 1d.; and the Perth Banking Company was founded partly to put an end to this nuisance.† The inevitable consequence followed: these excessive issues drove all the gold and silver out of the country, and the exchange with London fell.

"While the exchange between London and Carlisle was at par, that between London and Dumfries would sometimes be 4 per cent against Dumfries, though this town is not thirty miles distant from Carlisle. But at Carlisle, bills were paid in gold and silver; whereas at Dumfries they were paid in Scotch bank notes, and the uncertainty of getting those bank notes exchanged for gold and silver coin had thus degraded them 4 per cent. below the value of that coin."

And this was at a time, when, owing to the degraded state of the English coin, the foreign exchanges were adverse to England, and the market price of gold was £4 per oz.

87. The inevitable effects followed, a great demand for gold for exportation in Scotland, and the banks were all obliged to employ agents in London constantly collecting money for them at an expence of seldom less than $1\frac{1}{2}$ to 2 per cent.

"This money was sent down by the waggon, and insured by the carriers at an additional expence of three-fourths per cent., or 15s.

* Wealth of Nations. Vol. II., p. 334. Wakefield's Edition.

† Evidence of Mr. Sandeman.—Committee of Inquiry into Scotch and Irish Circulation. 1826. P. 259.

on the £100. Those agents were not always able to replenish the coffers of their employers so fast as they were emptied. In this case the resource of the banks was to draw upon their correspondents in London, bills of exchange to the extent of the sum they wanted. When those correspondents afterwards drew upon them for the payment of this sum, together with the interest and commission, some of those banks from the distress into which their excessive circulation had thrown them, had sometimes no other means of satisfying this draught, but by drawing a second set of bills, either upon the same, or upon some other correspondents in London, and the same sum, or rather bills for the same sum, would in this manner make more than two or three journies, the debtor bank always paying the interest and commission upon the whole accumulated sum. Even those Scotch banks which never distinguished themselves by their extreme imprudence, were sometimes obliged to employ this ruinous resource.

"The gold coin which was paid out either by the Bank of England, or by the Scotch Banks in exchange for that part of their paper which was over and above what could be employed in the circulation of the country, being likewise over and above what could be employed in that circulation, was sometimes sent abroad in the shape of coin, sometimes melted down and sent abroad in the shape of bullion, and sometimes melted down and sold to the Bank of England, at the high price of £4 an ounce. It was the newest, the heaviest, and the best pieces only, which were carefully picked out of the whole coin, and either sent abroad, or melted down at home, and while they remain in the shape of coin those heavy pieces were of no more value than the light, but they were of more value abroad, or when melted down into bullion at home."

At this period the Scotch Banks had got themselves into a very alarming position, from their ignorance of the true principles of regulating a paper currency, as well as of the effect of an excessive issue of paper in depressing the exchange, and causing an export of gold, and not perceiving that, while in this state, bringing gold into the country was like pouring water into a sieve, or like the toil of the Danaides. They had been far too prodigal in

granting cash credits, and allowing them to be converted into dead loans, without observing the rules that are specially applicable to them. And everything seemed to shew that matters would get worse, as the annihilation of the last Jacobite rebellion, in 1746, had freed the country for ever from the fear of internal disturbances, and numerous other companies were forming to add to the currency, which was already superabundant.

88. United in a common danger, the two principal Banks agreed to combine their influence and obtain an Act to remedy this, and the statute 1765, c. 49. was passed, suppressing all notes under 20s., and prohibiting those to be issued with the optional clause, and enacting that all such notes should be payable to the bearer on demand. The Banks also curtailed their credit accounts very extensively, and called up fresh capital. Owing to all these combined measures, the value of the Scotch currency was restored to par, and from that time to the present, although the issues of Bank Notes were absolutely free until 1845, the Scottish currency HAS NEVER VARIED FROM PAR.

89. The Bank of Scotland and the Royal Bank continued to be the only chartered Banks, till 1746, when the British Linen Company were incorporated, for the purpose of carrying on the linen manufacture and Banking in connection with it. This Company soon found it expedient to discontinue the linen part of their business, and confine themselves to Banking, and it has since become the most powerful and wealthy of the Scotch Banks; but it did not introduce any new feature into Scotch Banking, so that it does not require further notice here.

90. The severe lessons which the Scotch banks had received made them much more cautious in their issues, to the great annoyance of a vast number of speculators

and adventurers. These difficulties which they made about discounting, not only alarmed but enraged in the highest degree those projectors:

"Their own distress, of which this prudent and necessary reserve of the banks was no doubt the immediate occasion, they called the distress of the country; and this distress of the country, they said, was altogether owing to the ignorance, pusillanimity, and bad conduct of the banks, which did not give a sufficiently liberal aid to the spirited undertakings of those who exerted themselves in order to beautify, improve, and enrich the country. It was the duty of the banks, they seemed to think, to lend for so long a time, and to as great an extent as they might wish to borrow. The banks, however, by refusing in this manner to give more credit to those to whom they had already given a great deal too much, took the only method by which it was now possible either to save their own credit, or the public credit of the country. In the midst of this clamour and distress a new bank was established in Scotland for the express purpose of relieving the distress of the country."

91. This was the Ayr bank, which created such a sensation, and it was a miniature edition of the Mississippi scheme of John Law in France, which was the attempt to carry out into practice the theory of money developed by Law in his "Money and Trade Considered." We shall in a future chapter examine into and point out the fundamental fallacy upon which Law's ideas rested. This was not the only bank projected upon these principles; the Land Bank, which was a favored rival of the Bank of England by the Government, was attempted to be founded upon the same false ideas of money, which we shall show hereafter. We need not, therefore, be detained here further on the subject, than to say, that notwithstanding the fallacy upon which the Ayr Bank was founded, which must inevitably have terminated in disaster, it is unquestionably true that the great improvement in the agriculture of that county dates from the im-

petus it received from that bank, and that however severely the proprietors of it suffered, still the great advantages which are due to it, more than redeemed the loss of capital caused by its failure.

92. From the facility of creating capital when required, very exaggerated ideas have been entertained of the profits made by this paper currency. Although the notes issued by a bank are in effect an anticipation of the deposits of customers, it is a great error to suppose that they are as profitable to the bank as coin would be, because the expense of manufacturing them must be deducted from the profits, as well as the stamp imposed by law. When a customer deposits coin, the whole profits accrue to the bank, without any deduction; but when a bank issues paper notes, the profits upon them are no greater than coin, and the expence of producing them is by no means small. It was stated to the Committee of the House of Lords in 1826,* that the cost of each £1 in Scotland was about 7d., and that they lasted on an average about three years; so that the expense of each note amounted to about one per cent. per annum. But it is also stated, that usually from one-half to one-third of the notes fabricated were always in reserve, and these not only produce no revenue, but are a positive loss to it. So that, in calculating the *profits* of paper issues, it would probably amount to five per cent. upon two-thirds of the whole amount fabricated, from which there must be deducted one per cent. upon the whole amount. If this average be maintained, a simple calculation will shew that the net profits upon the whole number of notes is only about $2\frac{1}{3}$ per cent. To shew this as simply as possible, if the bank had £300 of notes fabricated, the profits would

* Evidence, p. 134.

be £10, and the cost £3, leaving £7 as the net profit upon £300, or £2·333 per cent. upon the whole.

93. Adam Smith very justly says, that the substitution of paper in the room of gold money replaces a very expensive instrument of commerce with one much less costly, and sometimes equally convenient. Circulation comes to be carried on by a new wheel, which it costs both less to erect and to maintain than the old one.* In his days he states the whole currency to have been about £2,000,000, of which three-fourths were paper. If the whole had been gold and silver, it is evident that it would have required produce to the value of £1,500,000 to have purchased the bullion of which the means of circulation was to be composed. Not only, therefore, did so large a portion of the currency, being paper, save the actual expenditure of that amount of capital being expended in an unremunerative way, but it set it free, and allowed it to be applied to the increase of production. Hence, the substitution of paper for gold not only saved a great portion of capital from being required for an unnecessary purpose, but caused it to be applied in developing the resources of the country. It is, therefore, a double benefit, and the increased operations this change of employment would have given rise to would in itself have required an increased currency to act as circulating power.

94. In speaking of the substitution of paper for gold, Adam Smith says,†

"Let us suppose, for example, that the whole circulating money of some particular country amounted at a particular time, to one million sterling, that sum being then sufficient for circulating the whole annual produce of their land and labor. Let us suppose,

* Wealth of Nations, Vol. II., p. 277. † *Ibid*, p. 279.

too, that some time thereafter, different banks and bankers issued promissory notes payable to the bearer, to the extent of one million, reserving in their different coffers £200,000 for answering occasional demands. There would remain, therefore, in circulation £800,000 in gold and silver, and a million of bank notes, or £1,800,000 of paper and money together. But the annual produce of the land and labor of the country had before required only one million to circulate and distribute it to its proper consumers, and that annual produce cannot be *immediately* augmented by those operations of banking. One million will, therefore, be sufficient to circulate it after them. The goods to be *bought and sold being precisely the same as before*, the same quantity of money will be sufficient for buying and selling them. The channel of circulation, if I may be allowed such an expression, will remain precisely the same as before. One million we have supposed sufficient to fill that channel. Whatever, therefore, is poured into it beyond this sum, cannot run in it, but must overflow. £1,800,000 are poured into it, £800,000, therefore, must overflow, that sum being over and above what can be employed in the circulation of the country. But *though this sum cannot be employed at home* it is too valuable to be allowed to be idle. *It will, therefore, be sent abroad*, to seek that profitable employment *which it cannot find at home.* But the paper cannot go abroad, because at a distance from the banks that issue it, and from the country in which payment of it can be exacted by law, it will not be received in currency payments. Gold and silver, therefore, to the amount of £800,000 will be sent abroad, and the channel of home circulation will remain filled with a million of paper instead of a million of those metals which filled it before."*

We have quoted this passage at length because it is the only rational foundation of the opinion he afterwards enunciates.

"The greater part of this paper was consequently over and above the value of the gold and silver, which would have circulated in the country had there been no paper money. It was over and above, therefore, what the circulation of the country could easily absorb and employ, and upon that account immediately returned

* Wealth of Nations. Vol. II., p. 279.

upon the banks in order to be exchanged for gold and silver, which they were to find as they could."*

It is also the foundation of Mr. Loyd's opinion that paper only displaces an *equal* amount of gold, and the great banking fallacy of the present day, that the issues of banks should be rigidly restricted in amount to what would be the amount of gold coin if they were not in existence.

95. The whole of this fallacy is built upon two tacit assumptions made by Adam Smith, which are both of them extravagant errors. In the first place, in describing the substitution of paper for gold, he speaks of it in such terms, as if it was a thing that could be done in an instant. Assuming one million of coin to be required for the necessary operations of a country, he seems to think that banks have it in their power to put forth a million of paper in the twinkling of an eye; and next he assumes that the increase of the currency gives rise to no increased industry *within* the country itself. It is true that at first he says faintly, that the annual produce cannot be *immediately* augmented by these operations of banking; but in the very next breath he drops any idea of there being any increase at all, and says that this additional sum "*cannot* be employed at home," and must be sent abroad. He therefore assumes that this increase takes place in an instant, and that the amount of industry in the country, or the amount of profitable employment in a country, is absolutely fixed and stationary. But when did mortal man ever conceive more extravagant ideas? The issue of a million of bank notes in such a country as supposed is not a thing that could be done in a day. Such an operation would inevitably require time to do it. Bankers do not issue their notes by upsetting cartloads of them in the

* Wealth of Nations. Vol. II., p. 311.

market place as a scramble for all the mob. On the contrary, however imprudent, reckless, and extravagant the schemes may be for which they are induced to issue them, it is always done at the solicitation of some one else, who has some operation in view. The displacement therefore of so much gold, and the introduction of so much paper is an operation which would necessarily take a long time to effect. Now, if we adopt Adam Smith's metaphor of the currency overflowing the channel of circulation, if we imagined it to come down in a cataract or a waterspout, very probably it would do so, but suppose the dwellers near the channel saw the river gradually rising, and raised its banks in exact proportion as they saw the water rising, would it overflow then? Certainly not. Nor would it do so, *unless the river rose more rapidly than the people could raise its banks to confine it.* The great error then of Adam Smith and Mr. Loyd is that they assume that no increase in operations or industry would take place. If they increased in *proportion* to the increase of the currency, its value would not alter. The assumption that is *necessary* to support Adam Smith's view, we have no hesitation in saying is an *impossible* case. If, therefore, when to a previously-existing gold currency there is added a paper currency, if new fields of industry are opened up, if new manufactures are started, if lands are reclaimed, they will absorb a currency far greater in amount than it would have been sufficient, if they had not been attempted, and so operations may be generated of a far greater amount than if there were nothing but a gold and silver currency. Now, it seems so obvious a truism, that if while any given amount of currency be required to conduct the operations of a country, any given increment be made to that currency, then if the increased operations which that increment of currency give

rise to, are in the same proportion to it as the operations previously carried on were to the previously-existing currency, the value of the whole currency will not be altered —that it seems incredible that it should be required to enunciate it, and moreover that it should be *fatal to the leading banking principle of the day.*

96. Seeing, then, that it is a change in the proportion of the currency compared to the operations it represents, that causes a change in its value, and not a variation in its absolute amount, it is clear that if a proportionate increase of industry accompanies an increased quantity of the currency, it will cause no change in its value, but if the currency increases faster than the operations, it will cause a diminution of its value. But how is it to be ascertained whether the currency is increasing too fast or not, because the phenomena are so intricate that the rise in price of a single article is quite insufficient for the purpose, and may proceed from other causes? A general rise in the prices of all commodities would be a tolerably safe indication, but so many people would ascribe the rise in each particular case to so many different causes, that it would be impossible to obtain unanimity upon the subject. What then is the test which every one who really understands the subject, must admit to be as certain and infallible as any demonstration in Euclid? It is the PRICE OF GOLD BULLION, and as a necessary consequence, the state of the foreign exchanges. So long as the market or paper price of gold bullion coincides with the Mint price, it is an infallible proof that the currency is not depreciated—that paper is at its par value. We have little hesitation in saying that the maxim that the issues of paper must be rigidly restricted to the gold they displace, is an unnecessary and cruel hardship to commerce and agriculture, and we may

quote here the prediction of Mr. Thornton, (for it is no new idea)—

"IT HAS BEEN ALREADY SHOWN THAT A MAXIM OF THIS SORT, IF STRICTLY FOLLOWED UP, WOULD LEAD TO UNIVERSAL FAILURE."*

97. While, therefore, we utterly dissent from the doctrine that the paper should be limited to the actual quantity of the gold coin it displaces, we think the preceding considerations suggest the following as the true limit:—*That the quantity of paper which the industry of the country can absorb at its par value, i.e., so long as it can purchase gold bullion at the mint price, is the quantity of paper it legitimately requires for a due development of its resources, and that is the quantity which it ought to have.* The preceding considerations shew that it requires no other limitation or restriction. The more paper the better, so long as it is exactly equivalent to its nominal value in gold, because it proves that the industry of the country is prosperous. The only problem in banking, then, with which the state or the law has any right to interfere, is, to devise such a system as may prevent paper being issued in such excessive quantities as to raise the market price of gold, and depreciate the standard of value.

98. We have hitherto been considering the means adopted by the Scotch banks to get their notes into circulation. We must now consider the checks and safeguards in operation to prevent too great a quantity being issued, so as to depreciate the value of the whole currency. We have hitherto been regarding each bank as a *centre of emission* of notes, and it is quite evident that

* Inquiry into the Nature and Effects of Paper Credit, p. 245.

unless there were some counteracting tendency they might increase indefinitely, as was the case with the French assignats. To use a phrase which is in popular use, if they were merely centres of *centrifugal** force, the paper currency would swell to such dimensions as would inevitably end in universal ruin. Any system, therefore, of paper currency must have *centripetal forces* as well, in order to take any superabundance of paper out of circulation, and preserve an equilibrium in value of the whole currency. Consequently, if banks are allowed to be centres of *emission* of paper currency, they must also be *centres of attraction* to draw out from circulation any quantity that may be more than sufficient for the purposes of commerce. This is effected by two methods in Scotland: first, by the relation of the banks towards the public; secondly, by their relation towards each other.

99. The way in which the banks act in relation to the public, to withdraw any excess of paper from circulation, is, either by having their notes payable in gold, without any delay whatever, at the will of the holder, or by the great principle of receiving very small deposits, and giving interest on the smallest deposits for however short a time they are left in the bank. The first of these is in common use in England, and requires little remark; but the second is peculiar to the Scotch banks, and is one of the principal safeguards against an over-issue of paper.

* I am perfectly aware that the senses in which I here use the words "centrifugal" and "centripetal" are quite inaccurate as far as regards their mechanical meanings; but there is scarcely one person in a thousand who knows the true meaning of the words, or has the right mechanical conception of the idea; and the senses they are used in here will sufficiently convey the idea I wish to express.

100. The Scotch banks receive deposits of two descriptions: 1, deposit accounts; 2, current accounts. In the year 1707, the Bank of Scotland first began to receive occasional lodgments of cash on deposit from the public, for which no interest was given. They were probably left with the bank for the sake of security, and might be reclaimed at any time by the owner. In 1729, money was received from the public, on "current accounts," on the treasurer's bond or bill. Interest at 5 per cent. was then allowed; and in 1731, the interest was fixed for deposits at 4 per cent. for twelve months, and 3 per cent. for six months. In 1762, notes payable to order by the treasurer for deposits began to be used as a regular branch of the business. In 1810, deposit receipts were commenced, and have since continued in use. By Act 40, Geo. III., c. 149, such receipts are exempted from stamp duty.*

101. I. Deposit Accounts. These are deposits which are left with the bank, and not intended to be operated upon by daily transactions like current accounts. The banks usually receive any deposit of £10, or upwards (we believe that they usually now receive deposits of not less than £1, especially in country districts), and grant interest upon it for the number of days it is left in the bank, and repay the whole of it along with the interest due for the period it is left, or such part as the depositor may require, on demand. The consequence of which is, that every one, however humble, is encouraged to go and deposit whatever currency he has in a bank.

Mr. Robert Paul says:—

"The system of deposit accounts, I think is a very great stimulus to the habits of industry, economy, and frugality in Scotland,

* Second Report, Banks of Issue, 1841, p. 302.

the whole surplus capital of the individual depositors is thus rendered productive. And in regard to the deposit receipts, I may just mention what is generally the way in which they are granted. To-day a person from the country appears at the bank, it may be with £20, £30, or £50; we probably never see him again till that day twelve-months, but we are sure of seeing him about that very day; if he has £20 in the bank, he may come and say; here are 4 guineas, you will give me a receipt for £25. He knows well that the £20, has earned 16s. interest, and I do consider the £4 4s. are just the savings of the year. He goes away with his new receipt, and returns on that day twelve months. Then again it is added to, and thus accumulated, and so in many thousand instances throughout the country.

"I have no hesitation in saying that, in my opinion, there is above £20,000,000 of money at the credit of depositors in the books of all the banks in Scotland (1826)."*

He also said that

"The interest paid on deposit accounts was one per cent. less than the market rate. There was no difference in the interest given on a current account or a deposit account—it was given for any sum and any length of time; £10 carried interest from the day it was paid into the bank—and the deposits were payable immediately and without notice—and generally speaking, they were made by the middling classes of society, the labouring, industrious classes of the community."

102. Mr. Kinnear said that

"The middling and lower orders of society, industrious, poor people, who were saving their money, and small capitalists who had realized a moderate sum of money, upon the interest of which they lived, were the chief depositors."

He also said

"If the cash account system has promoted the industry, that followed by the banks in Scotland of allowing interest upon sums

* Report of Committee of House of Lords on Irish and Scotch Currency, 1826, p. 123.

so low as £10 and even lower lodged in their hands, has been not less encouraging to the economy of the people. This system was adopted before the middle of the last century. The rate of interest allowed by the banks since then has been regulated by the value of money, and has of course fluctuated considerably, but it has ever been such as to afford as high a return to the depositor as has been consistent with the reasonable profit, and of course, the security of the Bank. The effect of it (of which the great banks have always been aware, and which they have steadily kept in view,) has been to encourage, and to afford the means of the accumulation of capital, among the lower as well as the higher orders, by placing within the reach of all a convenient, safe, and moderately profitable investment of money, and to offer an inducement to capitalists to retain their accumulations in Scotland, notwithstanding the opportunities or temptations which foreign investments might hold out."

Mr. Hugh Watt, who had been for many years one of the accountants of the Perth Banking Company, said,*

"I believe I am within the amount when I state that in the town of Perth there are paid £10,000 annually of interest on deposits of sums from £10 and not exceeding £100, and those sums are chiefly deposited by tradesmen, and by country people, farm servants, and others."

103. That the temptation to these depositors was the high rate of interest given for them was stated by Sir James Gibson Craig;—

"When the banks reduced their rate of interest some time ago, a great part of the deposits was drawn out to be invested in various different ways; and as the depositors did not get from the banks the interest upon which they were depending, and did not choose to take a less interest, many of them went into schemes which have turned out very ruinous to them. It has been one great cause of over speculation, that the people did not get the interest they had been accustomed to from the banks, they, therefore, drew it out, to invest it in joint stock companies, lent it to builders, or on other inferior securities, or became builders themselves.

* Report of Committee of House of Lords on Irish and Scotch Currency. P. 197.

"The lowering of interest on deposits would be attended with important consequences with regard to the smaller depositors. The banks and the branch banks act as savings banks to these people; in this way they encourage the industry and economy of the people, and of course improve their morals. If a smaller interest were to be given, the inducement to industry and economy would be lessened, and probably the poor people would become a prey to those around them who were not able to make good their money, but might continue to borrow it from them."

104. The Scotch banks invariably give interest upon the daily balances of their current accounts, according to the state of the money market, usually one per cent. less. The consequence of the system of these two kinds of accounts is, that every spare pound which is not absolutely requisite for the daily transactions of the people is taken and lodged in a bank. Every bank then acts as a *centre of attraction* to draw out of circulation, every £1 note which is not absolutely requisite to pay current expenses. Every Scotchman feels that he is losing money upon every note that he keeps idle in his pocket or in his house. Every tradesman loses money for any sum he keeps idle in his till; the consequence of which is, that every one deposits with his banker all the cash he can spare, before the close of business hours, and so a large amount is withdrawn from visible circulation, which would go to swell the apparent amount of currency if it were not for this attractive power of the bank. And not only does this necessarily act as a great inducement to the public to deposit their notes with the bank, but it also operates as a great check upon the bank in its issues; because it knows very well that every note it issues will in a very short time come back upon it either for payment in gold, or to be placed to the credit of some customer's account, upon which it will have to pay interest, only one per cent.

or so less than the interest it received, or intended to receive, from the person to whom they issued it. Hence, a little reflection will show what a great check upon over-issues this system of giving interest upon very small deposits for any time, however short, is, and how powerfully it acts to throw out of circulation the slightest excess of paper beyond the necessities of trade.

105. The great importance of the question how far a bank may safely proceed in discounting mercantile bills with its own paper, requires that we should examine the operation very closely. Adam Smith says,*

> "When a bank discounts to a merchant a real bill of exchange, drawn by a real creditor upon a real debtor, and which as soon as it becomes due is really paid by that debtor, it only advances to him a part of the value, which he would otherwise be obliged to keep by him unemployed, and in ready money for answering ccasional demands."

If the paper notes advanced by the bank were always redeemed by the real debtor, things might go smoothly enough, but Adam Smith has taken no notice of what would be the effect on the currency generally, and the bank, if the debtor fails to meet his engagement, and as this consideration is of the utmost importance, we must endeavour to supply the deficiency. When the bank discounts a bill of exchange with its own notes, it substitutes its own credit for that of the merchant, it creates a debt against itself to the amount of the notes issued, in favor of the merchant in the first instance, but as soon as the merchant makes a purchase with those notes, they fall into the general circulation of the country, the debt against the bank remaining the same. Now, for simplicity's sake, let us suppose that there is but one bank of

* Wealth of Nations. Vol. II., p. 298.

issue. We have supposed that the notes are issued by the merchant in purchase of goods, consequently as they represent an operation, they will not diminish the value of the currency generally. Now, at the time when the bill falls due, it is the merchant's duty to collect a sufficient quantity of the currency to discharge it. If he can do so, he will endeavour to collect a sufficient quantity of the bank's notes, and then when he goes to the bank, the position of the parties will be this,—the bank has a debt against the merchant on his bill, but the merchant has a debt of equal amount against the bank on its notes; consequently these two debts will extinguish one another, and a certain quantity of the currency is removed from circulation, which keeps up the value of the whole currency. But suppose the merchant fails, and has no power to collect a sufficient quantity of the currency to discharge his debt, how will the parties be then? The debt *due* to the bank perishes and is extinguished, but the debt *against* the bank remains. The bank expected that the debt it created against itself would be in due time extinguished by a debt of similar amount due to it from the merchant. But if the merchant cannot do this, the notes which ought to have been taken out of circulation, remain in circulation, but the debt they represented is extinguished, and consequently they only go to swell the amount of currency representing the transferable debt which existed previously to their being put into circulation; the inevitable consequence of which is, according to the whole course of argument maintained in this work, that they tend to cause a depreciation of the whole currency from excessive quantity. They are in effect nothing more than a wanton and mischievous addition to the previously existing currency, which, if repeated for a sufficient number of times, will necessarily cause a depre-

ciation of the whole currency, and will cause the paper to fall to a discount, or the market (*i. e.* the paper) price of gold to rise above the Mint price. They will further be a weapon against the bank itself, because they always expected that the debt created by them in favor of a particular merchant, though in the course of the currency of the bill it would circulate among the public generally, yet at the maturity of the bill an equal amount would again be concentrated in his hands, which would be paid and extinguished by a counter-debt against the merchant. If the merchant fails to pay his debt, the debt against the bank still remains in the hands of the public, and must be discharged out of the remaining capital of the bank, and the loss to it is exactly the same as if they had expected to pay a particular debt with some kind of goods, and those goods were burnt, or sent to the bottom of the sea, and they had to pay the debt out of their remaining capital. We shall find that these considerations are of great importance in a future chapter.

106. The next great safeguard against over-issue by any single bank, is the method of exchanges organized among themselves. All banks that issue notes payable to bearer on demand, expose themselves to the risk of enemies and rivals gradually collecting a large quantity of their notes, and presenting them suddenly for payment, in the hope of embarrassing them, if not damaging their reputation. Such a measure of hostility as this would be extremely undignified for any wealthy and powerful companies to resort to. At the same time bankers are not compellable to receive the notes of other bankers in payment of debts due to them, nor as deposits at their nominal value, any more than any other persons. A refusal to do so however would be attended with the utmost inconvenience and annoyance to their customers; conse-

quently, as in the course of business it will probably happen, that almost an equal number of each others' notes will be paid into each bank, they found it advantageous to meet at stated intervals and exchange their mutual debts, and whichever bank had least amount of notes to pay would receive the difference in cash from the other. The system of exchanging notes was begun in 1752 by the Bank of Scotland and the Royal Bank, under certain rules that were agreed to.*

107. This system has been improved and developed to meet the great extension of the Banking System at the present day. Most of the banks which have their head offices in Edinburgh and Glasgow, have a regular exchange of their notes amongst themselves two days a week in Edinburgh and Glasgow, and the balance between them being easily ascertained, used formerly to be paid by a ten days' draft upon London. Subsequently, this plan being found to be inconvenient, a plan was devised of settling the differences by Exchequer Bills of £1,000, and fractional parts of £1,000 are paid in the notes of the Bank of England, the Bank of Scotland, the Royal Bank, the British Linen Company, of £100 each, or gold. Every bank agreed to purchase an amount of Exchequer Bills, proportioned to their circulation, and these are kept and bear the distinguishing mark of "Edinburgh Exchange Bill," and are never permitted to go out of this circle. The practical result of this is, that if any bank issues notes with too great profusion, they are sure to find their way either back into the bank itself, or into some other bank, and will be returned upon it for payment on the next exchange day. We thus see that the consequences of an imprudent operation immediately recoil upon the bank. A consideration of the principles developed in the

* Second Report on Banks of Issue. 1841. P. 303.

last section but one, shew that if a bank discounts a bill with its own notes, and thereby creates a debt against itself, and if that debt is not cancelled by the counter debt of the merchant at the time intended, and so withdrawn from circulation, it infallibly gets into the possession of other banks who demand payment for it, which must be made good out of the remaining capital of the bank. A succession of such operations therefore must infallibly end by exhausting its means, and causing its ruin; and it is useless for it to attempt to issue new "promises to pay" to supply the loss, because, by the same means, these will be returned upon it for payment.

108. It is perfectly clear, therefore, that if one single member of the clearing banks makes disastrous issues, it will be immediately called upon to pay them, but it may be said that if *all* the members were equally speculative and imprudent, as they would still have equal claims upon each other, no particular one would suffer. But such a case as this is beyond the reach of probability. Where there are so many, it is scarcely possible to conceive but that one at least will continue its usual prudence; and even supposing that one only remained prudent, and all the others were imprudent, that single one continuing prudent would ruin all the rest, because, if all the others made extravagant issues, they would in the usual course of business find their way into the coffers of that one bank, and as it only made its usual issues, it would manifestly have to receive a balance in gold from each of the remaining ones, which would in the end exhaust all the others, and elevate that one upon their ruins.

109. We thus see that under the double system of giving interest on deposits for however short a period they are left with the bank, and constant exchanges of

notes that take place, that object is attained which we said before was the great desideratum in banking. Although they had it nominally in their power to issue paper to an unlimited extent, yet practically they are obliged to be as cautious in their issues *as if they are dealing with gold and silver.*

110. Under this system, which we may say winnows the currency of every superfluous note, it is surprising what a small quantity of paper is sufficient to carry on the operations of the country. Assuming the calculation of Adam Smith to be correct, that the gold and silver in circulation at the union was £1,000,000, it had certainly tripled its wealth when he wrote (1776). Yet the currency—paper and gold—only amounted to about £2,000,000. Since that time the country has, upon the most moderate calculation, increased tenfold in wealth. When the Chevalier captured Glasgow, in 1745, it was a small town of 12,000 inhabitants; it has now nearly 400,000—more than thirty times as large as it was only 110 years ago; yet in the year from April, 1840, to April, 1841, the notes in circulation varied from a minimum of £2,855,023 to a maximum of £3,905,166.* So little cause is there for fear, that under a free but well regulated system of banking, there is any danger of the country being inundated with an unlimited quantity of paper.

111. The witnesses examined before the Committee of the House of Commons, in 1840, differed among themselves as to whether the deposits in a bank are to be considered a part of the currency of the country. Some of those who excluded bills of exchange from the currency, admitted that deposits in a bank are so. But Mr. Loyd excluded deposits in a bank equally with bills of

* Second Report—Banks of Issue. 1841. P. 228.

exchange, from the designation of currency.* When we reflect upon the system as carried on in Scotland, where the deposits in the banks are a maximum, and the paper issues in circulation are a minimum, we shall see little cause to agree in the opinion. We have already quoted the passage in Mr. Loyd's evidence, at page 267, to which we may refer. We confess to a total inability to perceive the force of Mr. Loyd's opinion. We deny that it is possible to point out a shadow of difference whether a man deposits his bank notes in his own till or in the custody of his banker. It is a great disadvantage to any Scotchman to keep a single spare pound note idle in his house; the consequence is that he goes and gives it in charge of his banker, and the amount is placed to his credit. Now, Mr. Loyd actually says that by a man taking that note from his own house to his banker's and leaving it there, and which he is at full liberty to take out again at a moment's notice, it changes its nature! It is currency when in a private house, but *not* currency in the bank! Surely this is the most remarkable metamorphosis that ever entered into the imagination of a man. It is true it is not in *circulation* when it is in the bank, but neither is it so when lying in the man's house. But what difference does it make in regard to the man's purchasing power? Surely he is in every way as capable of making a purchase whether he has the notes in his own house, or in his banker's hands. In Scotland, cheques are by no means in such common use as in England. But if a man makes a purchase, what conceivable difference is there whether he takes the notes out of his own house, or whether he goes to his banker's and takes them from him, or whether he gives a *cheque* upon his banker to the seller of the goods. His purchasing power

* First Report, page 212. A. 2,663.

is absolutely identical, whether it be in the form of notes in his pocket, or in figures at his credit in his banker's book. Every man's purchasing power consists of the notes or money in his possession, the figures at his credit on his banker's books, and such Bills of Exchange in his possession as people will take in payment of goods (leaving out of the question what he may purchase on his own credit). To suppose that the figures standing at his credit in his banker's books, for which he may get notes at any moment he pleases, are in any way different from notes which he keeps in his own pocket, seems to us so utterly preposterous, that we cannot see what argument there can be to sustain such an opinion. On the contrary, we maintain that the phenomena of prices in Scotland are utterly inexplicable on such a supposition. Every body agrees that as the wealth of a country increases the currency in it will increase, and that as industry augments in any place, it must attract to itself a greater amount of the moving power, or currency. That a country should be constantly increasing in wealth and constantly diminishing in the amount of currency, is a paradox so violently absurd as to meet with instant rejection. Now, what is the case in Scotland? While the country has notoriously increased amazingly in wealth, the number of notes in circulation has been stationary, if not retrograde.

112. But the deposits in the banks have increased amazingly, and *pari passu* with the wealth of the country. There are supposed to be not less than £40,000,000 of deposits in the different banks of Scotland at the present day. And what does that mean, but that the purchasing power of the people is £40,000,000, over and above what they have in their own possession? These forty millions represent and denote the accumulated savings of the people of Scotland, just as much as if they were forty millions of

sovereigns, and their effect upon prices is exactly the same as if there were that number of sovereigns in the country. *We challenge any one to explain the phenomena of prices in Scotland upon any other hypothesis whatever, than by considering the deposits in the banks as an integral part of the currency of the country.*

113. These considerations illustrate a remark that we formerly made, that it is wholly impossible to form any idea of the wealth of a country by the amount of the currency in circulation. We see what a fatal error it would be to estimate the wealth of Scotland by the quantity of notes usually in circulation. Unreflecting persons, who thought that there must necessarily be some relation between the apparent currency and the wealth of a country, might be apt to sneer at the poverty of Scotland on seeing that there is little more than three millions of paper notes. But we have formerly observed that the useful effect of the currency is to be estimated by its *circulation*, *i. e.* by its transferences from hand to hand, and not by its amount. In order, then, to have any idea of the prosperity of Scotland, we must endeavour to discover, not the amount of the currency, but the amount of its *circulation*, and the only way to find that out is to ascertain the amount of the operations in and out of all the Banks in the country. That, and that only, is the true index to the prosperity of the country. But it is not in the power of any one to obtain access to the information which would lead to an accurate result, but if such information were made public by the respective Banks, we are quite safe in saying that it would present very surprising results, and instead of thinking meanly of it, men of sense would admire the system, by which so much capital is saved, and so small a quantity of visible currency is made to produce so great an effect.

114. The power of anticipating deposits by means of their circulating credit, has been the cause of that feature of the Scotch system, which, more eminently than any other, has produced the greatest benefit to the country, namely, the establishment of branches of the powerful and wealthy banks in every village in the country. It is impossible to appreciate justly the enormous superiority of the Scotch system, over that which was forced into existence by the monopoly of the Bank of England, until we come to read the hideous disasters caused by the failure of the English country bankers at several epochs, and contrast the two systems. Wherever the great banks found a favorable opening, they planted a branch to circulate their own notes, and vivify the industry of the locality. Every branch is under the constant superintendence and inspection of the head office, so that while there is scarcely any district, however remote or poor, that does not enjoy all the advantages which banking can confer, the humblest branch possesses all the power and security of the head office, in the metropolis; consequently these terrific failures of country bankers, which spread ruin and desolation and misery through whole districts, are almost unknown in Scotland. If a branch is unremunerative it is withdrawn, but any losses it has incurred must be made good by the Company.

115. Besides the security of this system of branches, it confers other great advantages upon the community, as it affords the cheapest and readiest method of transmitting capital from one part of the country to another. In an agricultural district, capital has always a tendency to accumulate; in a manufacturing or commercial one, it is always in demand. The very object of banking is to collect capital where it is superfluous, and to convey it to where it is defective. If a bank with its head office in

Edinburgh has a branch in an agricultural district, capital will be remitted to Edinburgh from that district; the same bank has probably a branch in a commercial district where there is a demand for it. The head office transmits it to the commercial district. The same phenomena exist in England; and the same things are done in a far more circuitous and clumsy method, which will be described afterwards. But the Scotch plan is far more ready and satisfactory, and from the transactions of every part of the country passing under the inspection of the same body, they can have far more just and comprehensive views of the state and wants of the country than when similar transactions are done by persons who have no connection with each other.

116. Adam Smith not inaptly compares the money of a country to a highway, which while it circulates and carries to market all the commodities of the country, produces nothing itself.* Adopting this metaphor, we may say, that the younger and poorer the country is, the cheaper should be the construction of its highways. It is all very well in England to have the Great Western Railway, but if they want to have a railroad in the newer parts of America, they content themselves at first with a single line of the cheapest construction, and afterwards as they advance in wealth and prosperity, they add another line, and improve the construction of the old one. Every one would condemn it as a mischievous waste of capital to construct a line similar to the Great Western Railway in the back-woods of America. So it is with the monetary highway. When the country is young and poor, it wants a *cheap* currency. What a severe oppression it would have been to the rising prosperity of Scotland, to have enforced its having a gold currency in the days of

* Wealth of Nations. Vol. II., p. 326.

Adam Smith; whereas, by permitting it to have a paper one, the capital which must have been employed in constructing the golden highway, was more usefully employed in developing the resources of the country. These notes have always borne a constantly diminishing ratio to the wealth of the country, so that the substitution of gold for paper is always becoming a matter less hurtful to the resources of the country. Assuming that it was determined to prohibit all notes under £5, in Scotland, it would be a matter of far less importance now, than it would have been eighty years ago, or even thirty, supposing that there was any advantage to be gained by it. Some theorists, from the mere love of uniformity, have always advocated the abolition of the £1 notes there, and in 1826, when it was determined to put an end to the £1 notes in England, it was also threatened in Scotland. Scotchmen, however, considered that their banking system was so vitally dependent upon their £1 notes, that they rose as one man to prevent it, and by their efforts it was staved off for some time, although it was plainly intimated by the ministers that it was a measure that must be adopted sooner or later. No one, however, cared to touch the people on so tender a point again, until Sir Robert Peel, having successfully carried his measures regarding banking in England, was also desirous to reduce the Scotch system to something like uniformity, but even he did not venture to abolish the £1 notes. He caused an Act to be passed, entitled "An Act to Regulate the Issue of Bank Notes in Scotland." Statute 1845, c. 38. The Act is given at length in the appendix, but the principal points in it may be shortly stated here: they are—

1. All persons had been prohibited by the Statute 1844, c. 32, from commencing to issue notes after the 6th May, 1844, in the United Kingdom, and all such persons in Scotland as were lawfully

issuing their notes between the 6th May, 1844, and the 1st May, 1845, were to certify to the Commissioners of Stamps and Taxes the name of the firm, and the places where they issued such notes.

2. The Commissioners were to ascertain the average number of such Bankers' notes in circulation during the year preceding the 1st May, 1845.

3. Such Bankers were authorized to have in circulation an amount of notes, whose average for four weeks was not to exceed the amount thus certified by the Commissioners, together with an amount equal to the average amount of coin held by the banker during the same four weeks. Of the coin three quarters must be gold and one quarter silver.

4. In case the Bank exceeds the legal amount, it is to forfeit the excess.

5. If two or more Bankers unite, they are authorized to have an issue of paper to the aggregate amount of issues of the separate Banks, as well as the amount of the coin held by the United Bank.

6. Notes of the Bank of England not to be legal tender in Scotland.

117. The Bank of Scotland was the only bank erected by Act of Parliament. Its original capital was £100,000. By the Statute 1774, c. 32, it was authorized to increase its original capital by £100,000. It was still further augmented by the Statute 1784, c. 12, by the amount of £100,000; by Statute 1792, c. 25, by £300,000; by Statute 1794, c. 19, by £400,000; and finally by Statute 1804, c. 23, (local and personal,) by £500,000. Making in all, a nominal capital of £1,500,000; of which sum £1,000,000 has been paid up. In 1818, the naturalization clause of the original Act was taken away.

118. The Royal Bank, and the British Linen Company were founded by charter, granted by virtue of the inherent prerogative of the Crown to grant charters to companies for trading purposes. These three banks have two privileges which are peculiar to them. The first is, that

liability of the shareholders is limited to the amount of stock held by them, that is, they are all on the principle of *limited liability*, about which there has been so much discussion lately. The second is, that the notes they issue are not required to have a stamp on each one, but they compound with the Stamp Office for an annual duty. Two of the banks which have been founded since 1746 have got charters—The Commercial (1810), and the National (1826), but the responsibility of their shareholders is not limited. Whatever theoretical differences of opinion there may be respecting the principle of limited liability in commercial matters, there can be no doubt that there is no distrust felt in Scotland on account of these banks being on that principle. One of them—the British Linen Company—is one of the largest and wealthiest banks in Scotland, and the other two enjoy quite as good credit as any unchartered one in which the fortunes of the shareholders are liable to their last farthing.

STATISTICS OF THE SCOTCH BANKS.

Instituted.	BANKS.	No. of Partners.	Paid-up Capital.	No. of Branches.	Head Office.	Authorized Circulation.	Average Circulation, 1853-4.	Coin 1853-4.
			£			£	£	£
1695	Bank of Scotland . . .		1,000,000	31	Edinburgh	300,485	396,179	155,608
1727	Royal Bank	979	2,000,000	9	Edinburgh	183,000	186,749	52,265
1746	British Linen Company . .	578	1,000,000	44	Edinburgh	438,024	501,663	159,633
1810	Commercial Bank . . .	645	600,000	53	Edinburgh	374,880	500,233	183,925
1825	National Bank of Scotland .	1486	1,000,000	42	Edinburgh	297,024	342,222	85,761
1829	Union Bank of Scotland . .	850	1,000,000	56	Edin. & Glasg.	415,690	519,750	168,380
1838	Edinburgh and Glasgow Bank	1540	1,000,000	22	Edin. & Glasg.	136,657	158,068	47,694
1825	Aberdeen Town and Country B.	484	134,575	14	Aberdeen	70,133	107,188	42,318
1836	North of Scotland . . .	1437	191,352	28	Aberdeen	154,319	196,382	58,857
1763	Dundee Banking Company .	76	60,000	1	Dundee	33,451	37,707	7,551
1838	Eastern Bank of Scotland .	420	121,140	4	Dundee	33,636	42,514	12,199
1832	Western Bank of Scotland .	1255	1,500,000	81	Glasgow	337,938	526,632	272,780
1838	Clydesdale Banking Company	1429	807,380	11	Glasgow	104,028	149,819	68,908
1839	City of Glasgow Bank . .	1270	1,000,000	43	Glasgow	72,921	178,635	119,796
1838	Caledonian Banking Company	819	125,000	8	Inverness	53,434	74,552	31,948
1766	Perth Banking Company .	200	100,050	7	Perth	38,656	49,187	18,037
1834	Central Bank of Scotland .	447	62,500	8	Perth	42,933	58,680	22,360
			11,701,997	462		2,787,209	4,038,160	1,505,220

APPENDIX.

STATUTE 1845 (8 & 9 Vict.) Cap. XXXVIII.

An Act to regulate the Issue of Bank Notes in *Scotland*.
[21st *July*, 1845.]

'WHEREAS by an Act made and passed in the Eighth Year of the Reign of Her Majesty, intituled *An Act to regulate the Issue of Bank Notes, and for giving to the Governor and Company of the Bank of* England *certain Privileges for a limited Period*, it was enacted, that from and after the passing of that Act no Person, other than a Banker who on the Sixth Day of *May* One thousand eight hundred and forty-four was lawfully issuing his own Bank Notes, should make or issue Bank Notes in any Part of the United Kingdom: And whereas it is expedient to regulate the Issue of Bank Notes by such Bankers as are now by Law authorized to issue the same in *Scotland:*' Be it therefore enacted by the Queen's Most Excellent Majesty, by and with the Advice and Consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the Authority of the same, That every Banker claiming to be entitled to issue Bank Notes in *Scotland* shall, within One Month next after the passing of this Act, give Notice in Writing to the Commissioners of Stamps and Taxes, at their head Office in *London*, of such Claim, and of the Place and Name and Firm at and under which such Banker has issued such Notes in *Scotland* during the Year next preceding the First Day of *May* One thousand eight hundred and forty-five, and thereupon the said Commissioners shall ascertain if such Banker was on the Sixth Day of *May* One thousand eight hundred and forty-four, and from thence up to the First Day of *May* One thousand eight hundred and forty-five, carrying on the Business of a Banker and lawfully issuing his own Bank Notes in *Scotland*, and if it shall so appear then the said Commissioners shall proceed to ascertain the average Amount of the Bank Notes of such Banker which were in Circulation during the said Period of One Year preceding the First Day of *May* One thousand eight hundred and forty-five, according to the Returns made by such Banker in pursuance of the Act passed in the Fourth and Fifth Years of the Reign of Her present Majesty, intituled *An Act to make further Provision relative to the Returns to be made by Banks of the Amount of their Notes in Circulation;* and the said Commissioners, or any Two of them, shall certify under their Hands to such Banker the average Amount when so ascertained as aforesaid, omitting the Fractions of a Pound, if any; and

it shall be lawful for every such Banker to continue to issue his own Bank Notes after the Sixth Day of *December* One thousand eight hundred and forty-five, to the Extent of the Amount so certified, and of the Amount of Gold and Silver Coin held by such Banker at the head Office or principal Place of Issue, of such Banker, in the Proportion and Manner herein-after mentioned, but not to any further Extent; and from and after the Sixth Day of *December* One thousand eight hundred and forty-five it shall not be lawful for any Banker to make or issue Bank Notes in *Scotland*, save and except only such Bankers as shall have obtained such Certificate from the Commissioners of Stamps and Taxes.

II. Provided always, and be it enacted, That if it shall be made to appear to the Commissioners of Stamps and Taxes that any Two or more Banks have by written Contract or Agreement (which Contract or Agreement shall be produced to the said Commissioners) become united within the Year next preceding such First Day of *May* One thousand eight hundred and forty-five, it shall be lawful for the said Commissioners to ascertain the average Amount of the Notes of each such Bank in the Manner herein-before directed, and to certify a Sum equal to the average Amount of the Notes of the Two or more Banks so united, as the Amount which the united Bank shall thereafter be authorized to issue, subject to the Regulations of this Act.

III. And be it enacted, That the Commissioners of Stamps and Taxes shall, at the Time of certifying to any Banker such Particulars as they are herein-before required to certify, also publish a Duplicate of their Certificate thereof in the next succeeding *London Gazette* in which the same may be conveniently inserted; and the Gazette in which such Publication shall be made shall be conclusive Evidence in all Courts whatsoever of the Amount of Bank Notes which the Banker named in such Certificate or Duplicate is by Law authorized to issue and to have in Circulation as aforesaid, exclusive of an Amount equal to the monthly average Amount of the Gold and Silver Coin held by such Banker as herein provided.

IV. And be it enacted, That in case it shall be made to appear to the Commissioners of Stamps and Taxes, at any Time hereafter, that any Two or or more Banks have by written Contract or Agreement (which Contract or Agreement shall be produced to the said Commissioners) become united subsequently to the passing of this Act, it shall be lawful to the said Commissioners, upon the Application of such united Bank, to certify in manner herein-before mentioned the Aggregate of the Amount of Bank Notes which such separate Banks were previously authorized to issue under the separate Certificates previously delivered to them, and so from Time to Time; and every such Certificate shall be published in manner herein-before directed, and from and after such Publication the Amount therein stated shall be and be deemed to be the Limit of the Amount of Bank Notes which such united Bank may have in Circulation, exclusive of an Amount equal to the monthly average Amount of the Gold and Silver Coin held by such Bank, as herein provided.

V. And be it enacted, That all Bank Notes to be issued or re-issued in *Scotland* shall be expressed to be for Payment of a Sum in Pounds Sterling, without any fractional Parts of a Pound; and if any Banker in *Scotland* shall, from and after the Sixth Day of *December* One thousand eight hundred and forty-five, make, sign, issue, or re-issue any Bank Note for the fractional Part of a Pound Sterling, or for any Sum together with the fractional Part of a Pound Sterling, every such Banker so making,

signing, issuing, or re-issuing any such Note as aforesaid shall for each Note so made, signed, issued, or re-issued forfeit or pay the Sum of Twenty Pounds.

VI. And be it enacted, That from and after the Sixth Day of *December* One thousand eight hundred and forty-five it shall not be lawful for any Banker in *Scotland* to have in Circulation, upon the Average of a Period of Four Weeks, to be ascertained as herein-after mentioned, a greater Amount of Notes than an Amount composed of the Sum certified by the Commissioners of Stamps and Taxes as aforesaid and the monthly average Amount of Gold and Silver Coin held by such Banker at the head Office or principal Place of Issue of such Banker during the same Period of Four Weeks, to be ascertained in manner herein-after mentioned.

VII. And be it enacted, That every Banker who after the Sixth Day of *December* One thousand eight hundred and forty-five shall issue Bank Notes in *Scotland* shall, on some One Day in every Week after the Thirteenth Day of *December* One thousand eight hundred and forty-five (such Day to be fixed by the Commissioners of Stamps and Taxes), transmit to the said Commissioners a just and true Account of the Amount of Bank Notes of such Banker in Circulation at the Close of the Business on the next preceding *Saturday*, distinguishing the Notes of Five Pounds and upwards, and the Notes below Five Pounds, and also an Account of the Total Amount of Gold and Silver Coin held by such Banker at the head Office or principal Place of Issue in *Scotland* of such Banker at the Close of Business on each Day of the Week ending on the same *Saturday*, and also on Account of the total Amount of Gold snd Silver Coin in *Scotland* held by such Banker, at the Close of Business on that Day; and on completing the first Period of Four Weeks, and so on completing each successive Period of Four Weeks, every such Banker shall annex to such Account the average Amount of Bank Notes of such Banker in Circulation during the said Four Weeks, distinguishing the Bank Notes of Five Pounds and upwards, and the Notes below Five Pounds, and the average Amount of Gold and Silver Coin respectively held by such Banker at the head Office or principal Place of Issue in *Scotland* of such Banker during the said Four Weeks, and also the Amount of Bank Notes which such Banker is, by the Certificate published as aforesaid in the *London Gazette*, authorized to issue under the Provisions of this Act; and every such Account shall specify the head Office or principal Places of Issue in *Scotland* of such Banker, and shall be verified by the Signature of such Banker or his Chief Cashier, or in case of a Company or Partnership by the Signature of the Chief Cashier or other officer duly authorized by the Directors of such Company or Partnership, and shall be made in the Form to this Act annexed marked (A.); and if any such Banker shall neglect or refuse to render any such Account in the Form and at the Time required by this Act, or shall at any Time render a false Account such Banker shall forfeit the sum of One Hundred Pounds for every such Offence.

VIII. And be it enacted, that all Bank Notes shall be deemed to be in Circulation from the Time the same shall have been issued by any Banker, or any Servant or Agent of such Banker, until the same shall have been actually returned to such Banker, or some Servant or Agent of such Banker.

IX. And be it enacted, that from the Returns so made by each Banker to the Commissioners of Stamps and Taxes the said Commissioner shall, at the End of the first Period of Four Weeks after the said Sixth Day of

December One thousand eight hundred and forty-five, and so at the End of each successive Period of Four Weeks, make out a general Return in the Form to this Act annexed marked (B.) of the monthly average Amount of Bank Notes in Circulation of each Banker in *Scotland* during the last preceeding Four Weeks, and of the average Amount of all the Gold and Silver Coin held by such Banker, and certifying under the Hand of any Officer of the said Commissioners duly authorized for that Purpose, in the Case of each such Banker, whether such Banker has held the Amount of Coin required by Law during the Period to which the said Return shall apply, and shall publish the same in the next succeeding *London Gazette* in which the same can be conveniently inserted.

X. And be it enacted that for the purpose of ascertaining the monthly average amount of Bank Notes of each Banker in Circulation, the Aggregate of the Amount of Bank Notes of each such Banker in Circulation at the Close of the Business on *Saturday* of each Week during the first complete period of Four Weeks next after the Sixth Day of *December*, One thousand eight hundred and forty-five, shall be divided by the Number of Weeks, and the average so ascertained shall be deemed to be the average of Bank Notes of each such Bank in Circulation during such Period of Four Weeks, and so in each successive Period of Four Weeks, and the monthly average Amount of Gold and Silver Coin respectively held as aforesaid by such Banker shall be ascertained in like Manner from the Amount of Gold and Silver Coin held by such Banker at the head Office or principal Place of Issue in *Scotland* of such Banker at the Close of Business on *Saturday* in each Week during the same Period; and the monthly average Amount of Bank Notes of each such Banker in Circulation during any such Period of Four Weeks is not to exceed a Sum made up by adding the Amount certified by the Commissioners of Stamps and Taxes as aforesaid, and the monthly average amount of Gold and Silver Coin held by such Banker as aforesaid during the same period.

XI. And be it enacted, that in taking Account of the Coin held by any such Banker as aforesaid with respect to which Bank Notes to a further Extent than the Sum certified as aforesaid by the Commisssioners of Stamps and Taxes may under the Provisions of this Act be made and issued, no Amount of Silver Coin exceeding One Fourth Part of the Gold Coin held by such Banker as aforesaid shall be taken into account, nor shall any Banker be authorized to make and issue Bank Notes in *Scotland* on any amount of Silver Coin held by such Banker exceeding the proportion of One Fourth part of the Gold Coin held by such Banker as aforesaid.

XII. 'And whereas, in order to ensure the rendering of true and faithful Accounts of the Amount of Bank Notes in Circulation, and the Amount of Gold and Silver Coin held by each Banker, as directed by this Act, it is necessary that the Commissioners of Stamps and Taxes should be empowered to cause the Books of Bankers issuing such Notes, and the Gold and Silver Coin held by such Bankers as aforesaid, to be inspected as herein-after mentioned;' be it therefore enacted, That all and every the Book and Books of any Banker who shall issue Bank Notes under the Provisions of this Act, in which shall be kept contained or entered, any Account, Minute, or Memorandum of or relating to the Bank Notes issued or to be issued by such Banker or of or relating to the Amount of such Notes in Circulation from Time to Time, or of or relating to the Gold and Silver Coin held by such Banker from Time to Time, or any

Account, Minute, or Memorandum, the Sight or Inspection whereof may tend to secure the rendering of true Accounts of the average Amount of such Notes in Circulation and Gold and Silver Coin held as directed by this Act, or to test the Truth of any such Account, shall be open for the Inspection and Examination at all seasonable Times of any Officer of Stamp Duties authorized in that Behalf by Writing signed by the Commissioners of Stamps and Taxes or any Two of them; and every such Officer shall be at liberty to take Copies of or Extracts from any such Book or Account as aforesaid, and to inspect and ascertain the Amount of Gold and Silver held by such Banker; and if any Banker or other Person keeping any such Book or having the Custody or Possession thereof or Power to produce the same, shall, upon demand made by any such Officer showing (if required) his Authority in that Behalf, refuse to produce any such Book to such Officer for his Inspection and Examination, or to permit him to inspect and examine the same, or to take Copies thereof or Extracts therefrom, or of or from any such Account, Minute, or Memorandum as aforesaid, kept, contained, or entered therein, or if any Banker, or other Person having the Custody or Possession of any Coin belonging to such Banker shall refuse to permit or prevent the Inspection of such Gold and Silver Coin as aforesaid, every such Banker or other Person so offending, shall for every such Offence forfeit the Sum of One hundred Pounds: Provided always that the said Commissioners shall not exercise the Powers aforesaid, without the Consent of the Commissioners of Her Majesty's Treasury.

XIII. And be it enacted, That every Banker in *Scotland* who is now carrying on or shall hereafter carry on Business as such, other than the Bank of *Scotland*, the Royal Bank of *Scotland*, and the *British* Linen Company, shall, on the First Day of *January* in each Year, or within Fifteen Days thereafter, make a Return to the Commissioners of Stamps and Taxes, at their head Office in *London*, of his Name, Residence, and Occupation, or, in the Case of a Company or Partnership, of the Name, Residence, and Occupation of every Person composing or being a Member of such Company or Partnership, and also the Name of the Firm under which such Banker, Company, or Partnership carry on the Business of Banking, and of every Place where such Business is carried on; and if any such Banker, Company, or Partnership shall omit or refuse to make such Return within Fifteen Days after the said First Day of *January*, or shall wilfully make other than a true Return of the Persons as herein required, every Banker, Company, or Partnership, so offending shall forfeit or pay the Sum of Fifty Pounds; and the said Commissioners of Stamps and Taxes shall on or before the First Day of *March* in every Year publish in some Newspaper circulating within each Town or County respectively in which the head Office or principal Place of Issue of any such Banker be situated a Copy of the Return so made by every Banker, Company, or Partnership carrying on the Business of Bankers within such Town or County respectively, as the Case may be.

XIV. And be it enacted, That if the monthly average Circulation of Bank Notes of any Banker, taken in the Manner herein directed, shall at any Time exceed the Amount which such Banker is authorized to issue and to have in Circulation under the Provisions of this Act, such Banker shall in every such Case forfeit a Sum equal to the Amount by which the average monthly Circulation, taken as aforesaid, shall have exceeded the Amount which such Banker was authorized to issue and to have in Circulation as aforesaid.

XV. 'And whereas by an Act passed in the Third and Fourth Years 'of the Reign of His late Majesty King *William* the Fourth, intituled '*An Act for giving to the Corporation of the Governor and Company of* 'the Bank of England *certain Privileges for a limited Period, under cer-* 'tain Conditions, it was enacted, that from and after the First Day of '*August* One thousand eight hundred and thirty-four, unless and until 'Parliament should otherwise direct, a Tender of a Note or Notes of the 'Governor and Company of the Bank of *England*, expressed to be payable 'to Bearer on demand, should be a legal Tender to the Amount expressed 'in such Note or Notes, and should be taken to be valid as a Tender to 'such Amount for all Sums above Five Pounds on all Occasions on which 'any Tender of Money may be legally made, so long as the Bank of '*England* should continue to pay on demand their said Notes in Legal 'Coin: Provided always, that no such Note or Notes should be deemed a 'legal Tender of Payment by the Governor and Company of the Bank of '*England*, or any Branch Bank of the said Governor and Company: and 'whereas Doubts have arisen as to the extent of the said Enactment;' for Removal whereof be it enacted and declared, That nothing in the said last-recited Act contained shall extend or be construed to extend to make the Tender of a Note or Notes of the Governor and Company of the Bank of *England* a legal Tender in *Scotland*: Provided always, that nothing in this Act contained shall be construed to prohibit the Circulation in *Scotland* of the Notes of the Governor and Company of the Bank of *England*, as heretofore.

XVI. And be it enacted that all Promissory or other Notes, Bills of Exchange, or Drafts, or Undertakings in Writing, being negotiable or transferable, for the Payment of any Sum or Sums of Money, or any Orders, Notes, or Undertakings in Writing being negotiable or transferable for the Delivery of any Goods, specifying their Value in Money less than the Sum of Twenty Shillings in the whole, heretofore made or issued, or which shall hereafter be made or issued in *Scotland*, shall, from and after the First Day of *January*, One thousand eight hundred and forty-six, be and the same are hereby declared to be absolutely void and of no Effect, any Law, Statute, Usage, or Custom to the contrary thereof in anywise notwithstanding; and that if any Person or Persons shall after the First Day of *January*, One thousand eight hundred and forty-six, by any Art, Device, or Means whatsoever, publish or utter in *Scotland* any such Notes, Bills, Drafts, or Engagements as aforesaid for a less Sum than Twenty Shillings, or on which less than the Sum of Twenty Shillings shall be due, and which shall be in anywise negotiable or transferable, or shall negotiate or transfer the same in *Scotland*, every such Person shall forfeit and pay for every such Offence any Sum not exceeding Twenty Pounds, nor less than Five Pounds, at the Discretion of the Justice of the Peace who shall hear and determine such Offence.

XVII. And be it enacted, That all Promissory or other Notes, Bills of Exchange, or Drafts, or Undertakings in Writing, being negotiable or transferable, for the Payment of Twenty Shillings, or any Sum of Money above that Sum and less than Five Pounds, or on which Twenty Shillings, or above that Sum and less than Five Pounds, shall remain undischarged, and which shall be issued within *Scotland* at any Time after the First Day of *January*, One thousand eight hundred and forty-six, shall specify the Names and Places of Abode of the Persons respectively to whom or to whose Order the same shall be made payable, and shall bear date before

or at the Time of drawing or issuing thereof, and not on any Day subsequent thereto, and shall be made payable within the Space of Twenty-one Days next after the Day of the Date thereof, and shall not be transferable or negotiable after the Time hereby limited for Payment thereof, and that every Endorsement to be made thereon shall be made before the Expiration of that Time, and to bear Date at or not before the Time of making thereof, and shall specify the Name and Place of Abode of the Person or Persons to whom or to whose Order the Money contained in every such Note, Bill, Draft, or Undertaking is to be paid; and that the signing of every such Note, Bill, Draft, or Undertaking, and also of every such Endorsement, shall be attested by One subscribing Witness at the least; and which said Notes, Bills of Exchange, or Drafts, or Undertakings in Writing, may be made or drawn in Words to the Purport or Effect as set out in the Schedules to this Act annexed marked (C.) and (D.); and that all Promissory or other Notes, Bills of Exchange, or Drafts, or Undertakings in Writing, being negotiable or transferable, for the Payment of Twenty Shillings, or any Sum of Money above that Sum and less than Five Pounds, or in which Twenty Shillings, or above that Sum and less than Five Pounds, shall remain undischarged, and which shall be issued in *Scotland* at any Time after the said First Day of *January* One thousand eight hundred and forty-six, in any other Manner than as aforesaid, and also every Endorsement on any such Note, Bill, Draft, or other Undertaking to be negotiated under this Act, other than as aforesaid, shall and the same are hereby declared to be absolutely void, any Law, Statute, Usage, or Custom to the contrary thereof in anywise notwithstanding: Provided always, that nothing in this Clause contained shall be construed to extend to any such Bank Notes as shall be lawfully issued by any Banker in *Scotland* authorized by this Act to continue the Issue of Bank Notes.

XVIII. And be it enacted, That if any Body Politic or Corporate or any Person or Persons shall, from and after the said First Day of *January* One thousand eight hundred and forty-six, make, sign, issue, or re-issue in *Scotland* any Promissory Note payable on demand to the Bearer thereof for any Sum of Money less than the Sum of Five Pounds, except the Bank Notes of such Bankers as are hereby authorized to continue to issue Bank Notes as aforesaid, then and in either of such Cases every such Body Politic or Corporate or Person or Persons so making, signing, issuing, or re-issuing any such Promissory Note as aforesaid, except as aforesaid, shall for every such Note so made, signed, issued, or re-issued forfeit the Sum of Twenty Pounds.

XIX. And be it enacted, That if any Body Politic or Corporate or Person or Persons shall, from and after the passing of this Act, publish, utter, or negotiate in *Scotland* any Promissory or other Note (not being the Bank Note of a Banker hereby authorized to continue to issue Bank Notes), or any Bill of Exchange, Draft, or Undertaking in Writing being negotiable or transferable, for the Payment of Twenty Shillings, or above that Sum and less than Five Pounds, or on which Twenty Shillings, or above that Sum and less than Five Pounds, shall remain undischarged, made, drawn, or endorsed in any other Manner than as is herein-before directed, every such Body Politic or Corporate or Person or Persons so publishing, uttering, or negotiating any such Promissory or other Note (not being such Bank Note as aforesaid), Bill of Exchange, Draft, or Undertaking in Writing as aforesaid, shall forfeit and pay the Sum of Twenty Pounds.

XX. Provided always, and be it enacted, That nothing herein contained shall extend to prohibit any Draft or Order drawn by any Person on his Banker, or on any Person acting as such Banker, for the Payment of Money held by such Banker or Person to the Use of the Person by whom such Draft or Order shall be drawn.

XXI. And be it enacted, That all pecuniary Penalties under this Act may be sued or prosecuted for and recovered for the Use of Her Majesty, in the Name of Her Majesty's Advocate General or Solicitor General in *Scotland*, or of the Solicitor of Stamps and Taxes in *Scotland*, or of any Person authorized to sue or prosecute for the same, by Writing under the Hands of the Commissioners of Stamps and Taxes, or in the Name of any Officer of Stamp Duties, by Action of Debt, Bill, Plaint, or Information in the Court of Exchequer in *Scotland*, or, in respect of any Penalty not exceeding Twenty Pounds, by Information or Complaint before One or more Justice or Justices of the Peace in *Scotland*, in such and the same Manner as any other Penalties imposed by any of the Laws now in force relating to the Duties under the Management of the Commissioners of Stamps; and it shall be lawful in all Cases for the Commissioners of Stamps and Taxes, either before or after any Proceedings commenced for Recovery of any such Penalty, to mitigate or compound any such Penalty, as the said Commissioners shall think fit, and to stay any such Proceedings after the same shall have been commenced, and whether Judgment may have been obtained for such Penalty or not, on Payment of Part only of any such Penalty, with or without Costs, or on Payment only of the Costs incurred in such Proceedings, or of any Part thereof, or on such other Terms as such Commissioners shall judge reasonable: Provided always, that in no such Proceeding aforesaid shall any Essoign, Protection, Wager of Law, nor more than One Imparlance be allowed; and all pecuniary Penalties imposed by or incurred under this Act, by whom or in whose Name soever the same shall be sued or prosecuted for or recovered, shall go and be applied to the Use of Her Majesty, and shall be deemed to be and shall be accounted for as Part of Her Majesty's Revenue arising from Stamp Duties, any thing in any Act contained, or any Law or Usage, to the contrary in anywise notwithstanding: Provided always, that it shall be lawful for the Commissioners of Stamps and Taxes, at their Discretion, to give all or any Part of such Penalties as Rewards to any Person or Persons who shall have detected the Offenders, or given Information which may have led to their Prosecution and Conviction.

XXII. And be it enacted, That the Term "Bank Notes" used in this Act shall extend and apply to all Bills or Notes for the Payment of Money to the Bearer on demand, other than Bills and Notes of the Governor and Company of the Bank of *England;* and that the Term "Banker" shall extend and apply to all Corporations, Societies, Partnerships, and Persons, and every individual Person carrying on the Business of Banking, whether by the Issue of Bank Notes or otherwise; and that the Word "Person" used in this Act shall include Corporations; and that the Word "Coin" shall mean the Coin of this Realm; and that the Singular Number in this Act shall include the Plural, and the Plural Number the Singular, except where there is any thing in the Context repugnant to such Construction; and that the Masculine Gender in this Act shall include the Feminine, except where there is any thing in the Context repugnant to such Construction.

XXIII. And be it enacted, That this Act may be amended or repealed by any Act to be passed in the present Session of Parliament.

SCHEDULES TO WHICH THIS ACT REFERS.

SCHEDULE (A).

Name and Title, as set forth in Licence.	Name of the Firm.	Head Office or principal Place of Issue.	Amount of Circulation authorized by Certificate.	Notes in Circulation during the Week ending day of .		* Average of Four Weeks of all Notes.		Account of Coin held by the Banker at the Head Office or principal Place of Issue, on the day of .		* Average Total Amount of Coin held by the Bank during Four Weeks ending .	
				£5 and upwards.	Under £5.	£5 and upwards.	Under £5.	Gold.	Silver.	Gold.	Silver.
								£	£		

Held on each Day of the Week preceding that Day.		
	Gold.	Silver.
Monday . .		
Tuesday . .		
Wednesday .		
Thursday .		
Friday . .		
Saturday. .		

* To be inserted at the End of each Period of Four Weeks.

I being [the Banker, Chief Cashier, Managing Director, *or* Partner of the Bank, *or other Officer duly authorized by the Director, as the Case may be,*] do hereby certify, That the above is a true Account of the Notes in Circulation and Coin held by the Bank during the Week above written.

Dated the Day of 18

(Signed)

SCHEDULE (B).

Name and Title, as set forth in Licence.	Name of the Firm.	Head Office or principal Place of Issue.	Amount of Circulation authorized by Certificate.	Average Amount of Notes in Circulation during the Four Weeks ending the day of .			Average Total Amount of Coin held during Four Weeks ending .	
				£5 and upwards.	Under £5.	TOTAL.	Gold.	Silver.

I hereby certify, That each of the Bankers named in the above Return who have issued an Amount of Notes beyond that authorized in their Certificate [with the Exception of *A.B. or C.D., as the case may be,*] have held an Amount of Gold and Silver Coin not less than that which they are required to hold during the period to which this Return refers.

Dated

Officer of the Stamps.

SCHEDULE (C.)

[*Place*] [*Day*] [*Month*] [*Year*]

Twenty-one Days after Date I promise to pay to *A.B.* of [*Place*], or his Order, the Sum of for Value received by

Witness. *E.F.* *C.D.*

And the endorsement, toties quoties.

[*Day*] [*Month*] [*Year*]

Pay the Contents to *G.H.* of [*Place*], or his Order.

Witness, *J.K.* *A.B.*

SCHEDULE (D.)

[*Place*] [*Day*] [*Month*] [*Year*]

Twenty-one Days after Date pay to *A.B.* of [*Place*], or his Order, the Sum of Value received as advised by

To *E.F.* of [*Place*]. *E.D.*

Witness, *G.H.*

And the Endorsemeut, toties quoties.

[*Day*] [*Month*] [*Year*]

Pay the Contents to *J.K.* of [*Place*], or his Order.

Witness, *L.M.* *A.B.*

LONDON.
KING, QUEEN STREET, NEW CANNON STREET.